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ABSTRACT

The document comprises three articles which analyze roles and tasks of teachers in innovative secondary schools in Belgium, Norway, and England. Innovative secondary schools are interpreted as schools which favor educational practices such as open classrooms, team teaching, individual student projects, student participation in decision making, flexible scheduling, elective courses, and elimination of formal grading. The first article, written in the French language, presents information about innovation at L'Athenee Royal de Gembloux--a high school in a small industrial town outside Brussels, Belgium. Major objectives of the school are to encourage freedom of curriculum choice, individualized instruction, and relevance of subject matter. Teachers work toward these objectives by offering counseling and guidance to students, evaluating students individually by oral examination, providing remedial tutoring, encouraging group work, and offering varied curriculum options. The second article focuses on the Landoya high school, located in a suburb of Oslo, Norway. Teaching techniques favored at Landoya include team teaching, encouragement of student self-direction, cooperation with students in decision making and soliciting feedback from students. The third article examines teaching and learning at Countesthorpe College, located near Leicester, England. The school's chief contribution to pedagogical originality is team teaching in an open school setting, with emphasis on variety of individual choice within broadly defined common curriculum areas. (DB)

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ED160054

# TEACHER TASKS IN INNOVATIVE SCHOOLS
# TACHES DES ENSEIGNANTS DANS DES ECOLES INNOVATRICES

## VOL. II

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

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## PREFACE

1. Within the framework of the programme of work of the Education Committee, the OECD has over the last few years undertaken an analysis of various aspects of teacher policies in primary and secondary education.

2. Previous studies were mainly concerned with how teachers' roles and functions evolve when innovations are introduced in primary and secondary schools and with the ~~general~~ general implications for teacher training.

3. As the work developed, it appeared useful to complete these studies with an analysis of the actual tasks that the school staff - and more particularly the teachers - are called upon to perform when implementing innovations at the level of compulsory education, and a number of innovative schools have therefore been selected for such detailed analysis of actual practices.

4. The interest shown in these analyses has encouraged the Secretariat to publish them under the general title :"Teacher Tasks in Innovative Schools". This publication is one of a series of three volumes :

Vol. I is concerned with primary schools in United States, Netherlands and United Kingdom.

Vol. II deals with compulsory secondary education in Belgium, Norway and United Kingdom.

Vol. III is concerned with utilisation of teacher aids in some European countries and United States.

These studies are being issued in one language version only, the original one in which they were prepared.

# PREFACE

1. Le Secrétariat de l'OCDE poursuit depuis quelques années, dans le cadre du programme d'activités du Comité de l'Education, l'analyse des divers aspects des politiques à mener vis-à-vis des enseignants de l'enseignement primaire et secondaire.

2. Jusqu'à présent, les études ont surtout porté sur l'évolution des rôles et des fonctions des enseignants face à l'introduction d'innovations dans les écoles primaires et secondaires ainsi que sur les conséquences générales de cette évolution sur la formation des enseignants.

3. A ce stade des travaux, il est apparu nécessaire de compléter ces études par une analyse des tâches mêmes que le personnel éducatif - et plus particulièrement les enseignants - ont à accomplir pour la mise en oeuvre d'innovations au niveau de la scolarité obligatoire. Le Secrétariat a donc choisi d'étudier quelques écoles innovatrices afin d'analyser en détail les pratiques réelles qui s'y développent.

4. L'intérêt provoqué par ces analyses a conduit le Secrétariat à les publier sous le titre général de "Tâches des enseignants dans des écoles innovatrices". La présente publication fait partie d'une série de trois volumes :

Le volume I est consacré à des écoles primaires innovatrices aux Etats-Unis, aux Pays-Bas et au Royaume-Uni.

Le volume II traite d'écoles secondaires innovatrices en Belgique, en Norvège et au Royaume-Uni.

Le volume III concerne l'utilisation d'assistants dans quelques pays européens et aux Etats-Unis.

Ces études sont publiées en une seule langue, celle dans laquelle elles ont été rédigées.

# BELGIQUE

## L'ATHENEE ROYAL DE GEMBLOUX: ETUDE DE CAS

par

Claude Javeau
Président du Conseil d'Administration du
Comité pour l'Etude des Problèmes de l'Emploi et du Chômage
"CEPEC"

## AVANT-PROPOS

Cette étude a été commandée par l'Organisation de Coopération et de Développement Economiques à Claude JAVEAU, Maître de Recherche au Centre d'Etude des Problèmes Sociaux et Professionnels de la Technique ( Institut de Sociologie de l'Université Libre de Bruxelles ), assistant à l'Université Libre de Bruxelles, professeur à l'Institut National Supérieur des Arts du Spectacle et à l'Ecole Nationale Supérieure d'Architecture et des Arts Visuels, à Bruxelles.

Elle a pour objet les enseignants de l'Athénée Royal de Gembloux (1), établissement désigné par le commanditaire de l'étude. L'auteur du présent rapport a rencontré longuement le préfet des études de l'athénée, ainsi que la directrice du centre P.M.S. local, le 15 juin 1976. Il est retourné à l'athénée le 10 novembre 1976, pour y tenir une discussion de groupe de longue durée avec un certain nombre de professeurs, en présence du préfet des études.
Les faits rapportés dans l'étude ont trait à l'année scolaire 1975-1976. Depuis lors, certaines modifications ont été apportées à l'enseignement rénové: les classes d'accueil, notamment, ne permettent plus le passage dans l'enseignement général ( deuxième année du cycle d'observation ). Elles mènent à l'enseignement professionnel, ou reversent, après un an, les élèves jugés aptes en première année du cycle d'observation. Néanmoins, nous avons adopté certains éléments de la nouvelle nomenclature, pour rendre notre texte plus compréhensible.

Le préfet des études, M. SEQUARIS , ainsi que les enseignants que nous avons rencontrés, nous ont réservé le meilleur accueil. Nous devons en particulier remercier M. le Préfet des Etudes, qui n'a pas hésité à nous consacrer de nombreuses heures, afin de nous apporter le plus grand nombre d'informations possible. Qu'il trouve ici l'expression de notre vive gratitude.

Claude JAVEAU

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(1) Athénée Royal de Gembloux, rue Docq 26, 5800 Gembloux.

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# I.- INTRODUCTION

## A. L'établissement

L'Athénée Royal de Gembloux résulte de la transformation, en 1948, d'une Ecole Moyenne de l'Etat. A cette époque, une Ecole Moyenne ne comportait que les trois premières années de l'enseignement secondaire général, et les études qu'on y accomplissait étaient considérées comme une finalité, sanctionnée par un " diplôme d'Ecole Moyenne ". Les élèves qui en sortaient, vers l'âge de 15 ans, pouvaient occuper des emplois subalternes dans l'administration ou les bureaux privés. Il s'agissait d'un premier échelon dans la catégorie des professions intellectuelles. Les écoles moyennes étaient fréquentées par des enfants de petite classe moyenne se trouvant au début d'un processus d'ascension sociale. Les plus doués d'entre eux poursuivaient éventuellement leurs études dans les années supérieures d'un athénée ou lycée de grande ville. Les écoles moyennes étaient surtout implantées dans les localités de moyenne importance. Pour les enfants des classes plus pauvres, l'enseignement primaire offrait alors sa propre finalité: le quatrième degré, qui conduisait l'enfant jusqu'à la fin de l'obligation scolaire légale, soit 14 ans, limite qui n'a plus varié depuis 1919 jusqu'à nos jours.

Le quatrième degré a pratiquement disparu de nos jours. Les élèves auxquels il était destiné se retrouvent dans les sections inférieures de l'enseignement professionnel ou technique, ou dans les orientations correspondantes de l'enseignement rénové.

Depuis la fin de la guerre, un grand nombre d'écoles moyennes ont été transformées en athénées royaux, afin de répondre à une demande accrue de formation scolaire plus poussée. En même temps se reflétaient dans ces transformations les conséquences d'une urbanisation accrue des modes de vie. Dans de nombreuses petites villes, le mode de vie proche de celui des campagnes environnantes s'est modifié dans le sens d'un alignement sur celui des grandes villes, toujours proches dans un pays aussi exigu que la Belgique. Une classe moyenne plus nombreuse et mieux nantie, engagée dans des activités tertiaires plus diversifiées, a demandé pour ses enfants un enseignement davantage approfondi et diversifié lui aussi. Ce n'est pas ici le lieu d'examiner comment les deux réseaux - l'officiel et le libre, c'est-à-dire respectivement l'enseignement de l'Etat, des provinces et des communes et l'enseignement catholique - ont répondu, chacun de leur côté, à cette demande. Pour ce qui est de l'Etat, qui nous intéresse seul ici, il a créé de nouveaux athénées royaux, mixtes dès leur création, à l'inverse de la tradition, et transformé des écoles moyennes en athénées royaux, mixtes également.

L'Athénée Royal de Gembloux rassemble dans un même établissement tous les niveaux d'enseignement depuis l'école maternelle jusqu'à l'ex-rhétorique, c'est-à-dire la classe terminale de l'enseignement secondaire général. On y compte donc une école maternelle ( ex-gardienne ), une école primaire dite " préparatoire ", et les sections d'athénée proprement dites auxquelles étaient jointes, jusqu'à la généralisation de l'enseignement rénové, diverses sections professionnelles, du niveau correspondant à l'ancienne catégorie A4 ( formation d'ouvriers spécialisés ). Ces sections d'athénée étaient les sections traditionnelles: gréco-latine, latin-mathématiques, économiques, scientifiques "A" et scientifiques "B" ( modernes-sciences ). Seule la section " latin-sciences ", qu'on rencontre dans nombre d'autres établissements, fait défaut. Les sections A4 enseignaient les métiers du bois, du fer et de la construction. Une section ' familiale " a été transformée en section de " travaux de bureau " de niveau professionnel.

Depuis 1969, l'enseignement rénové a été introduit à l'Athénée de Gembloux, qui a fait partie de la toute première série d'établissements à appliquer volontairement ce nouveau type d'enseignement. A l'heure actuelle, le " rénové " est d'application dans toutes les classes du niveau secondaire de l'Athénée. Le fonctionnement de cet enseignement a été fixé par divers textes législatifs et réglementaires, qui reposent sur diverses expérimentations, menées au départ en dehors de tout cadre codifié. L' Athénée de Gembloux fut parmi les expérimentateurs de la première vague. Rappelons que, dans son principe, le " rénové " prétendait s'articuler autour d'un tronc commun de départ, qui doit aller en se diversifiant progressivement, selon les choix et les capacités des élèves. Trois degrés étaient prévus: un degré d'observation, un degré d'orientation et un degré de détermination. Chaque degré compte deux années d'études. En cours d'études, diverses réorientations sont possibles, tout comme la possibilité de se diriger vers une option de finalité ( sans ouverture vers l'enseignement supérieur ). Pour les moins doués ou favorisés des élèves entrant en première année à l' Athénée, un enseignement d'accueil est prévu, qui a pour but, soit de préparer l'élève à rejoindre l'une des filières du rénové, soit - c'est le cas le plus fréquent - de l'aiguiller vers une finalité professionnelle. A l'Athénée Royal de Gembloux, ce degré d'accueil mène aux sections ex-A4 professionnelles et à la section de travaux de bureau.

L'enseignement rénové a été l'objet de nombreuses attaques, certaines très violentes parfois, de la part des milieux conservateurs et même de certains milieux plus progressistes, qui lui reprochaient, eux, son caractère d'improvisation et le manque de préparation des enseignants qui devaient y " fonctionner ". Les milieux conservateurs ont surtout dénoncé dans l'enseignement rénové une tentative de " nivellement par le bas ". On ....

.. s'achemine actuellement vers une synthèse des deux types d'enseignement, et on peut écrire qu'un certain nombre des grands principes de base de l'enseignement rénové, et notamment les plus audacieux d'entre eux, ont été récusés lors de la généralisation du système (1).

Le Préfet des Etudes de l'Athénée Royal de Gembloux a été l'un des plus chauds promoteurs de l'enseignement rénové, et on peut avancer que ce type d'enseignement, grâce à cette circonstance favorable, a " mieux pris " dans cet établissement que dans un grand nombre d'autres écoles similaires. On remarquera que l'Athénée reste cependant construit, du point de vue de l'enseignement qui s'y donne, sur un plan hybride, puisqu'à côté des filières " rénovées " proprement dites, continue à exister une section professionnelle à l'ancienne mode - l'année préparatoire étant simplement devenue l' " année d'accueil ".

---

(1) Les systèmes mis en place respectivement dans les deux parties linguistiques du Royaume ne correspondent pas entièrement. Il y aurait beaucoup à écrire sur les soubassements idéologiques et sociologiques de cette querelle des Anciens et des Modernes qui a déchiré de nombreux secteurs de l'opinion publique belge. Remarquons seulement que s'il faut bien tenir compte d'un nombre appréciable d'innovations pédagogiques, l'enseignement rénové tel qu'il est appliqué actuellement, avec ses sections en cascades, reproduit les anciennes divisions de l'enseignement traditionnel, et ce semble-t-il, au profit des mêmes catégories sociales.

En 1975-1976, la population scolaire dans le cycle secondaire de l'Athénée Royal de Gembloux se répartissait comme suit:

| | | | | | |
|---|---|---|---|---|---|
| 1er degré | 1ère rénové | 112 | | | |
| | 2ème rénové | 118 | 230 | | |
| | 1ère accueil | 25 | | | |
| | 2ème professionnelle | 31 | 56 | 286 | |
| 2ème degré | 3ème rénové "long" | 69 | | | |
| | 4ème rénové "long" | 61 | 130 | | |
| | 3ème rénové "court" | 32 | | | |
| | 4ème rénové "court" | 24 | 56 | 186 | |
| 3ème degré | 5ème rénové | 55 | | | |
| | 6ème rénové | 46 | 101 | 101 | 573 |

L'enseignement rénové " court " est un enseignement de finalité où les études sont plus diversifiées et plus poussées que dans l'enseignement professionnel de type classique. Pour l'objet du présent rapport, seuls les élèves des deux premiers degrés nous intéressent: ils sont au nombre de 472 au total. Les 101 élèves exclus de cette étude, qui se trouvent en 5ème ou 6ème rénové, se destinent en principe à l'enseignement supérieur, en ordre principal à l'Université ( 50 % d'entre eux au moins ).

La ville de Gembloux, sur la ligne ferrée de grande communication de Bruxelles à Namur ( et ensuite vers Luxembourg et la Suisse ) est une petite ville industrielle entourée de gros bourgs ruraux établis sur la très riche campagne brabançonne. A la suite de la fusion de communes, elle comptera, en 1977, 18.000 habitants. Sa principale industrie est la cartellerie. Mais son premier titre de gloire est la présence, sur son territoire, d'une Faculté de Sciences Agronomiques, qui délivre le diplôme universitaire d'ingénieur agronome ( avec diverses options, après cinq années d'études ). Cette Faculté est à présent rattachée organiquement à l'Université de Liège. Comme elle est, en Belgique francophone, la seule de son espèce à relever du réseau officiel ( l'Université Catholique de Louvain forme ses propres agronomes ), elle accueille des étudiants venant de tous les coins de Wallonie et de Bruxelles. Elle reçoit aussi pas mal d'étrangers. Le nombre total d'étudiants, cependant, n'est jamais très élevé:

478 en 1975

Gembloux est une ville d'écoles: outre l'Athénée Royal, elle comporte aussi un collège catholique, qui ne comprend que les sections modernes. Mais Namur n'est pas loin, qui offre une grande variété d'écoles. A l'Athénée Royal est lié un Centre Psycho-Médico-Social de l'Etat, dont la zone d'activités s'étend sur tout le pays environnant. L'Athénée entretient de bonnes relations avec ce centre PMS, ainsi qu'avec l'Association des Parents, très agissante, composée principalement de membres de classes moyennes, et présidée par un commerçant de la ville (2). Autrefois, l'Association des Parents était aux mains des notables, principalement des professeurs de la Faculté d'Agronomie, mais la situation a changé, par suite de l'hostilité du Préfet des Etudes. L'Athénée ne connaît cependant pas de véritable gestion associative, au sens officiel du terme. Ajoutons que la section syndicale des enseignants, relevant de la Centrale Générale des Services Publics (3), est fort agissante. Le corps enseignant lui-même est composé pour un tiers de licenciés universitaires et pour deux tiers d'agrégés de l'enseignement moyen inférieur, dits aussi régents, diplômés des écoles normales moyennes. Bien qu'un conflit existe, au niveau national entre ces deux catégories d'enseignants, elles semblent vivre, à Gembloux, en bonne intelligence.

## B. Caractéristiques des élèves.

Les 472 élèves qui nous intéressent, toutes sections des deux premiers degrés réunies, ont entre 12 et 15 ans théoriquement. Compte tenu des retards " normaux ", on peut considérer qu'un quart des plus âgés a plus des 15 ans d'âge limite. Il y a un nombre approximativement égal de filles et de garçons.

Les élèves proviennent des écoles primaires de la ville et des environs, mais aussi des écoles primaires du Brabant Wallon, voire de communes francophones de la couronne bruxelloise. Sauf à les envoyer à Bruxelles, les parents de ces élèves qui désirent pour leurs enfants un enseignement rénové n'avaient jusqu'il y a peu d'autre choix possible que Gembloux. L'hinterland de l'Athénée Royal de Gembloux est donc plus étendu qu'on ne s'y attendrait.

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(2) Cette Association des Parents est affiliée à la Fédération des Associations de Parents de l'Enseignement Officiel ( F.A.P.E.O. ).

(3) Syndicat d'obédience socialiste, largement majoritaire dans l'enseignement officiel.

Cependant, l'internat qui lui est rattaché, et qui ne permet d'héberger que 25 élèves, est réservé aux jeunes filles uniquement. A leur sortie du deuxième degré, les élèves se destinent:

- s'ils sortent d'une section professionnelle ou d'une section de " rénové court ": à la vie professionnelle ( exercice d'un métier );

- s'ils sortent d'une section de " rénové long ": aux 5ème et 6ème années de l'enseignement rénové, dans une des options au choix: littéraire, scientifique, technique, économique et sociale, artistique. Lorsque ces mêmes élèves sortiront de l'athénée, munis de leur certificat d'aptitude, ils se dirigeront vers l'enseignement supérieur. 50 % iront s'inscrire à l'Université ( à Bruxelles principalement, mais aussi à Namur ). La Faculté d'Agronomie n'est pas un recruteur privilégié.

Pour entrer à l'Athénée, selon les dispositions en usage en Belgique, nulle autre condition n'est requise que d'avoir obtenu son certificat d'études primaires. Pour entrer dans une section professionnelle, à défaut de ce certificat, il faut avoir accompli au moins 4 années d'études primaires et avoir atteint l'âge de 13 ans.

L'origine sociale des élèves se trouve principalement dans la petite classe moyenne: les parents sont commerçants, ou employés, ou fonctionnaires. On trouve aussi quelques pères ouvriers, surtout d'élèves des classes professionnelles. Si les gros fermiers envoyent plus volontiers leurs enfants dans les établissements catholiques, on trouve à l'Athénée Royal de Gembloux quelques fils ou filles de petits cultivateurs. L'éventail des classes sociales présentes à l'Athénée Royal de Gembloux ne peut donc prétendre représenter la stratification sociale du pays, ni même de la région. Ajoutons qu'il y a très peu d'élèves étrangers à l'athénée, où l'immigration ne cause aucun problème. Sauf s'ils habitent la ville, la plupart des élèves sont acheminés vers l'Athénée par autobus ou par le train. Il n'existe pas de service de ramassage scolaire.

Il existe à l'Athénée Royal de Gembloux un comité d'élèves assez agissant, qui entretient avec la direction de l'école des rapports de concertation informels. Ses membres les plus actifs sont des élèves des classes terminales, qui ne nous intéressent pas dans le cadre de ce travail. Les classes terminales disposent aussi d'un " foyer " dans les locaux de l'établissement. Celui-ci est par ailleurs assez vétuste, et ne semble guère jouir de l'attention bienveillante du Fonds des Constructions Scolaires.

## C. Caractéristiques de l'innovation pédagogique.

L'enseignement rénové ne fait guère appel à une technologie nouvelle. Lorsque celle-ci existe, ce qui n'est guère le cas à Gembloux, elle n'intervient pas à titre primordial dans la nouvelle démarche d'enseignement.

L'objectif principal de l'enseignement rénové consistait à instaurer davantage de démocratie dans les processus de sélection sociale mis en oeuvre dans les établissements scolaires. Il s'agissait avant tout d'instaurer une manière d'enseignement " à la carte " pouvant répondre aux aspirations et aux capacités de chaque élève en particulier. La suppression des anciens clivages, générateurs et reproducteurs de discriminations sociales, entre enseignement général et technico-professionnel, devait accélérer le mouvement de démocratisation. L'expérience a montré que ces clivages, quoiqu'atténués, se sont maintenus dans une certaine mesure. Il ne revient certes pas au même de suivre des études dans le rénové, selon qu'on est inscrit dans un athénée royal ou dans une ancienne école technique $A_3$-$A_2$.

Les réformes pédagogiques ne devaient intervenir qu'en appoint de cette intention réformatrice basée sur des considérations d'ordre économico-social. L'école secondaire belge devait se voir dotée d'un esprit nouveau, plutôt que de méthodes nouvelles.

On ne peut donc prétendre que l'avènement de l'enseignement rénové ait entraîné la mise en oeuvre d'innovations pédagogiques importantes. Les professeurs appelés à appliquer la réforme n'ont été soumis à aucun recyclage organisé. Il leur a été demandé d'adopter une nouvelle disposition d'esprit à l'égard de l'école et des élèves, sans que des instruments nouveaux leur soient confiés. Bien que la réforme ait été préparée avec davantage de soin qu'on ne l'a prétendu, et que pas mal d'enseignants y aient été associés, un grand nombre de professeurs l'ont ressentie comme une manoeuvre politique imposée par des groupes inconnus d'eux et sur lesquels ils n'exerçaient aucun contrôle. Il en est résulté une hostilité avouée de la part d'une partie non négligeable du corps enseignant secondaire, et notamment de la part de nombreux chefs d'établissements.

L'enseignement rénové est néanmoins accompagné par certaines modifications d'ordre pédagogique, parmi lesquelles nous retiendrons principalement:

(a) le remplacement du systeme habituel des notes par un contrôle continu des connaissances, donnant lieu à des échanges de vue dans les conseils de classe, qui décident des carrières scolaires des élèves;

(b) le remplacement des examens traditionnels par des délibérations des conseils de classe, appelés en fin d'année à trancher pour chaque élève en particulier. Notons qu'à l' Athénée Royal de Gembloux, l'examen oral a été rétabli dans les options principales à l'issue du dernier degré ( qui échappe à cette étude ). Cette mesure a été prise à la fois pour " sécuriser " certains professeurs, effrayés par l'unique délibération du conseil de classe, et pour initier les élèves à un mode de contrôle des connaissances qui est la règle dans les études supérieures auxquelles la plupart d'entre eux se destinent. Les résultats obtenus lors de ces examens interviennent dans la délibération finale au titre d'éléments d' appréciation parmi d'autres.

(c) l'instauration d'un système de rattrapage pour les élèves en retard dans l'une ou l'autre branche; à Gembloux, le rattrapage est encouragé, surtout dans les classes supérieures, et individualisé.

(d) le travail de groupe: dans l'enseignement rénové, les élèves se livrent moins à du travail solitaire. La méthode des équipes permet aux élèves de rassembler eux-mêmes la documentation afférant au cours: dans cette optique, le professeur n'est plus un informateur qui monologue, mais un conseiller qui oriente, dialogue, encourage. A Gembloux, la présence de spécialistes extérieurs au corps professoral est facilement acceptée.
Ces spécialistes, témoins privilégiés de l'état d'avancement des connaissances dans l'une ou l'autre discipline, servent de " doublures " aux professeurs trop souvent prisonniers des procédures administratives. Notons, par surcroît, que l'Athénée Royal de Gembloux compte dans son corps professoral un certain nombre de personnalités qui se sont affirmées dans des domaines extérieurs à l'enseignement, notamment dans le domaine littéraire.
Par ailleurs, l' Athénée Royal de Gembloux est l'une des trois écoles secondaires de Belgique francophone où a été introduit le système du coordinateur: un professeur, élu par ses pairs, est chargé de coordonner l'enseignement dans une branche donnée ou une série de branches connexes. A Gembloux, il s'agit des langues germaniques, qu'enseignent douze professeurs ( 4 licenciés, 8 régents ): c'est un jeune licencié stagiaire qui a été élu par les autres enseignants de ces branches. Pour lui permettre d'assumer ses tâches spécifiques, le coordonateur bénéficie d'une réduction de ses prestations hebdomadaires de cinq heures. Le système n'est encore appliqué que dans ce groupe de branches bien précis.

(e) la pluralité des options: le jeune élève entrant dans l'enseignement rénové est appelé à " tâter " de diverses disciplines avant d'opérer les choix qui détermineront la filière qu'il suivra dans les deuxième et troisième degrés. Il est cependant illusoire de croire que tous les choix théoriques sont possibles: les filières existantes sont fonction du statut originel de l'établissement, et le choix sera davantage orienté vers le " technique " si l'on se trouve dans une ancienne école technique, et davantage vers le " littéraire " si l'on se trouve dans un athénée à clientèle aisée qui avait pour tradition de favoriser sa section greco-latine. La personnalité et les options idéologiques du chef d'établissement jouent ici un grand rôle. D'autre part, si la classe d'accueil doit en principe permettre aux élèves peu favorisés de rejoindre les classes normales de l'enseignement rénové, il n'en est guère ainsi dans la pratique en général. Le plus souvent, cette classe sert d'antichambre aux classes professionnelles de type traditionnel. C'est ainsi que se passent les choses à l'Athénée Royal de Gembloux.

Ajoutons encore que dans la logique de l'enseignement rénové, les élèves ne participent pas à l'élaboration des programmes, et que l'école ne se trouve pas nécessairement intégrée à un ensemble socio-culturel plus vaste. La gestion associative elle-même n'est pas spécifique à l'enseignement rénové. On a déjà vu qu'elle n'était pas pratiquée à Gembloux, bien que la direction de cet établissement acceptait la concertation avec l'association des parents et le comité des élèves, ainsi qu'avec les représentants syndicaux des enseignants. Comme c'est la règle dans l'enseignement rénové, l'Athénée Royal de Gembloux travaille en étroite collaboration avec le centre P.M.S. qui lui est attaché.

## II.- LES REALITES PEDAGOGIQUES

### A. La relation pédagogique

A l'Athénée Royal de Gembloux, l'enseignement rénové est réellement appliqué dans les faits. On n'insistera jamais assez, à cet égard, sur l'importance que revêt, en matière d'innovation pédagogique, la personnalité du chef de l'établissement. Alors que les pouvoirs de celui-ci sont fortement limités par les contrôles de l'autorité organisatrice, le chef d'établissement jouit dans la plupart des écoles d'une aura de puissance inexplicable dans certains de ses aspects, et ce, pour le meilleur et pour le pire. Il incarne l'autorité, et bon nombre d'enseignants perçoivent cette autorité de manière mythique.

N'oublions pas que le milieu de l'enseignement ne peut jamais se débarrasser tout à fait de certains traits d'infantilisme. Dans cette perspective, le père reste le père ( ou la mère reste la mère ), même s'il est indigne.

Le Préfet des Etudes de l'Athénée Royal de Gembloux fut, il y a quelques années, l'un des véritables promoteurs de l'enseignement rénové. Il était normal, dès lors, que cet enseignement trouve une terre d'élection dans l'établissement qu'il dirige. Ajoutons que les qualités personnelles de cet ancien professeur de français ne sont pas pour rien dans sa réussite et dans celle de son école: ouverture d'esprit, mépris de la bureaucratie, goût de la non directivité, art de l'accueil, telles sont quelques-unes des qualités que nous sommes heureux de lui reconnaître. Tous les enseignants que nous avons rencontrés les reconnaissaient également et se réjouissaient d'en bénéficier.

Si l'enseignement rénové n'a pas entraîné la mise en oeuvre d'une technologie originale - bien qu'il en ait, parfois, favorisé l'introduction dans les écoles -, il trouve son originalité dans une modification du rapport élève-enseignant. L'enfant devient le centre de la relation pédagogique, et devient même pédagogue à son tour: plusieurs professeurs de Gembloux nous ont affirmé que les enseignants eux-mêmes se forment dans le rénové. A cet égard, ils ont aussi souligné qu'il y avait avantage à n'avoir jamais fonctionné dans l'enseignement traditionnel. Selon eux, la formation acquise à l'Université ou à l'école normale ne prépare pas convenablement à l'enseignement rénové. C'est en travaillant dans cette forme d'enseignement que se forme peu à peu leur " religion ". La direction de l'athénée facilite grandement cet apprentissage, en laissant chaque professeur pratiquer le rénové selon ses capacités et ses méthodes personnelles. Le professeur est vraiment tenu, fréquemment, d'improviser. Ce n'est pas là le moindre mérite du rénové, et il ressort bien de l'exemple de Gembloux, où les choses se passent bien, que si l'enseignement renové représente un sensible surcroît d'intérêt pour les élèves dans leurs études, il accroît aussi considérablement l'intérêt des enseignants pour leur métier.

A Gembloux, les professeurs qui reçoivent les jeunes élèves lors de la période de l'accueil, au début de la première année du degré d'observation, s'efforcent de les connaître, principalement sous l'angle de leurs relations familiales et avec leur environnement social. L'objectif est de former des groupes homogènes, en amenant l'élève à " décoller " de sa famille et à s'intégrer dans la communauté scolaire avec ses propres motivations et aspirations. Certains enseignants utilisent la méthode des jeux de rôle, d'autres invitent les élèves à " raconter " leur famille et leur environnement.
On a souligné à Gembloux, que de telles démarches requièrent des qualités psychologiques assez particulières. Il faut éviter, en effet, que certaines techniques ne se révèlent trop manipulatrices, ou dérivent vers des séances de dynamique des groupes qui peuvent être très dangereuses.

S'il est important que des groupes définitifs se constituent assez vite, et que les professeurs les aient " vite en mains ", il convient aussi que les enseignants, mal formés aux disciplines de la psychologie moderne, ne se transforment pas en apprentis sorciers. Notons que le centre psycho-médico-social n'intervient guère à ce stade. Il ne fait pas passer de tests aux élèves, et ne cherche pas, par des techniques " scientifiques ", à connaître les motivations des élèves.

Si l'élève devient le centre de la relation pédagogique, c'est donc à lui qu'est laissée, en principe, l'initiative quant à la façon d'apprendre la matière. Car il reste une matière à apprandre, et selon les professeurs de Gembloux, la plupart des élèves entrent encore à l'athénée avec la détermination d'apprendre quelque chose.

### B. Le processus d'apprentissage

La mise en oeuvre de nouvelles techniques d'apprentissage ne peut être envisagée avec le même esprit d'innovation dans toutes les matières. Certaines branches sont privilégiées, notamment le français ( langue maternelle ). D'autres, au contraire, sont défavorisées, par exemple les mathématiques, qui sont encore tributaires de programmes très impératifs.
Pour illustrer la nouveauté dans les processus d'apprentissage, nous avons choisi le cours de français, en nous basant sur l'expérience de deux professeurs de l'athénée, dont l'un est également un poète et essayiste connu, édité à Paris.

La démarche essentielle est d'amener les élèves à poser eux-mêmes des questions à propos des textes qu'ils étudient, au lieu de devoir répondre, comme par le passé, aux questions prévues par le manuel ou l'anthologie. Le matériel didactique peut être utilisé pour cette fin.

Un professeur a cité le cas d'un extrait de *La Guerre des Boutons*, dans lequel certains mots avaient été remplacés par des petits points. Les enfants ont demandé ce que signifiaient ces petits points, et le professeur a apporté le texte original. Les élèves ont pu se rendre compte qu'il s'agissait principalement de termes grossiers. Il s'en est suivi une discussion sur le rôle de la grossièreté dans la vie sociale. On voit bien qu'il s'agit là d'un retournement de la démarche classique. Partant d'un manuel ordinaire, les élèves ont interrogé une particularité typographique propre à un autre âge de l'enseignement, et en sont arrivés à mettre en cause certains comportements sociaux.

Dans le cours de français, les matériels peuvent être de toute nature: les journaux, notamment, fournissent de bonnes bases de discussion. Un des buts des enseignants, en effet, est de parvenir à la mise en évidence des structures sociales. Grâce au travail en équipe, il est possible de faire apparaître des situations problématiques. Les élèves sont donc amenés à acquérir des nouvelles connaissances de manière *informelle* et relativement *ouverte*, bien que le professeur apparaisse toujours comme le meneur de jeu, et comme la référence permanente lorsqu'il s'agit de comparer et d'analyser les situations mises en évidence.

Il faut noter qu'il ne semble pas que les élèves utilisent fréquemment les informations qu'ils reçoivent ailleurs, et notamment celles qui proviennent de la télévision. Cette remarque, émise par plusieurs enseignants, notamment de français, est très intéressante. Elle pourrait montrer que l' " école parallèle " ( l'expression est de Georges Friedmann ) ne joue pas le rôle d'une école. C'est à l'école réelle que les informations sont vraiment décortiquées, analysées, éclairées sous différents angles. La permanence du rôle classique de l'école, étendu aux nouvelles tâches que l'enseignement rénové permet aux professeurs de proposer à leurs élèves, implique que les enseignants soient à même de jouer leur rôle d'informateurs convenablement et en bonne connaissance de cause. Le professeur doit désormais être capable d'avouer son ignorance de l'un ou l'autre problème soulevé, et de rechercher les réponses attendues conjointement avec ses élèves. Voilà un exemple encore de la manière dont l'enseignement rénové est appelé à travailler sur les professeurs eux-mêmes. Non seulement l'information ne procède plus d'eux de manière formelle, mais ils sont même amenés à se faire imposer la discussion d'éléments d'information qu'ils ne connaissent guère. Le professeur doit alors procéder de manière semblable à celle de ses élèves, et en même temps qu'eux. C'est un bon moyen de resserrer le groupe pédagogique.

Il peut apparaître que des techniques de ce genre ne constituent pas des innovations au sens entier du terme. Cependant, elles n'ont pu réellement apparaître dans l'enseignement belge qu'à la faveur de l'avènement de l'enseignement rénové. En outre, elles n'ont pu se développer selon toutes leurs potentialités que dans des établissements comme l'Athénée Royal de Gembloux, grâce à la capacité créatrice d'enseignants " branchés sur la modernité " et l'ouverture d'esprit du préfet des études.

Le cours de français est certes mieux indiqué que d'autres pour procéder selon les techniques que nous venons de citer Mais il est également possible de les appliquer dans d'autres branches, par exemple en biologie ou en chimie ( en " sciences " dans les premières années du cycle ). L'étude du milieu biologique, par exemple, permet facilement de susciter de l'intérêt pour les problèmes écologiques. Ceux-ci, à leur tour, renvoient à des structures sociales.

## C. Le besoin de coordination

Une lacune grave est ressentie assez durement par les enseignants les mieux engagés sur de telles voies. Il s'agit de l'absence de coordination, soit entre professeurs des mêmes branches, soit entre professeurs de branches diverses, mais qui peuvent se rencontrer sur certains terrains communs - et tous peuvent pratiquement le faire.

Nous avons déjà signalé qu'il existait à Gembloux, chose assez rare dans l'enseignement belge, un coordinateur pour les enseignements des langues germaniques. On se souviendra qu'en Belgique, pays bilingue, les langues germaniques, le néerlandais en tête, prennent une place importante dans l'enseignement secondaire. La tâche de ce coordinateur est de veiller à ce que les différents professeurs de langues germaniques abordent leurs cours dans des esprits relativement semblables, enchaînent convenablement la matière d'une année à l'autre, étudient, d'une langue à l'autre, des sujets similaires. Mais ce coordinateur lui-même nous a dit regretter que d'autres branches ne soient pas associées dans la formule de la coordination. Par exemple, il serait bon d'harmoniser certains sujets du cours de français et du cours d'anglais - le même thème traité par deux dramaturges dans l'une et l'autre langue, un texte étudié dans une des langues et traduit dans l'autre, etc.. Rien ne s'opposerait davantage à coordonner certains cours de langue et certains cours de sciences: pour prendre un exemple peut-être simpliste, pourquoi ne pas associer le professeur de sciences à l'étude des Fables de la Fontaine, qui grouillent d'animaux familiers mais néanmoins peu connus. Dans le même esprit, une certaine harmonisation permettrait d'éviter des heurts entre professeurs de français et de morale non confessionnelle, qui abordent, eux aussi, des thèmes de " critique sociale ".

Les professeurs interrogés ont souligné que la coordination ne gagnait pas nécessairement à être impérative. Il ne s'agit pas, pour eux, de décréter: " A telle heure, réunion de la Commission de coordination ". Ils accordent leur préférence à un système plutôt informel de coordination, qui implique surtout l'existence de lieux de rencontre - la salle des professeurs, sorte de salle d'attente entre deux cours, n'étant guère appropriée.

Il convient de reconnaître, toutefois, que les professeurs ne se rencontrent pas tous en dehors des heures de travail, et qu'en outre, lorsqu'ils se rencontrent, ils ne parlent pas toujours de problèmes de travail. Un grand nombre d'enseignants habitent en dehors de Gembloux et des environs ( un certain nombre vit à Bruxelles, guère trop éloigné par le train ). Ce sont donc toujours les mêmes qui se voient et se revoient, et les problèmes de la coordination ne sont pas le sujet principal de leurs discussions. Une formule souple reste à trouver. Il ne faut pas oublier qu'elle est tributaire de contraintes administratives diverses, d'autorisations d'en haut. Il serait souhaitable, en effet, que les professeurs fussent soulagés de quelques heures de cours pour pouvoir consacrer un temps suffisant aux réunions de coordination. Mais, pour ce faire, il faut une décision ministérielle ( et, au préalable, une consultation syndicale est indispensable ).

## D. Le poids de la bureaucratie

Cette remarque nous ramène sur le problème de la bureaucratie. Dans un système scolaire aussi centralisé que celui de la Belgique, il était inévitable que l'introduction de l'enseignement rénové s'accompagnât d'un volume important de documents, ainsi que d'une relance des activités bureaucratiques en général. Les autorités de tutelle n'ayant pas encore compris les avantages de l'autonomie scolaire (1), l'avènement du rénové devait par la force des choses leur fournir l'occasion de contrôles nouveaux, d'autant plus qu'il s'agissait de voir dans quelle mesure l'expérience se déroulait selon les expectations et les prévisions.
Il ne faut pas oublier que, d'emblée, une partie importante du secteur de l'enseignement a déclaré son hostilité à l'enseignement rénové ( à l'occasion des élections communales d'octobre 1976, dans de nombreuses communes, des candidats conservateurs ont promis de protéger l'existence d'établissements traditionnels, ou du moins de réintroduire de l'enseignement traditionnel dans le rénové ).

Les principaux reproches adressés, dès le début, à l'enseignement rénové, étaient qu'il fallait provoquer un nivellement par le bas ( pensez donc: des sections techniques dans les athénées royaux, qui risquaient de débaucher quelques fils de familles honorables! ) et qu'il signifiait la mort de l'humanisme traditionnel, seul capable d'acheminer les élèves vers l'Université et de leur garantir une carrière réussie ( sous-entendu, dans les couches dominantes de la société ). Fausse querelle, en vérité, car on a vu que l'innovation essentielle du rénové réside dans la chance qu'il accorde aux enseignants bien motivés d'adopter un nouvel esprit didactique, de promouvoir un nouveau type de relation pédagogique, de s'ouvrir à un mode informel-ouvert de communication des connaissances. Reste, évidemment, que presque tout, dans la formation professionnelle des enseignants, s'opposait à cet état d'esprit. L'enseignement belge, semblable en cela à tous les enseignements en crise, a subi l'influence d'un fort courant de misonéisme, qui n'est que l'expression d'une crainte devant l'avenir, d'un compréhensible repli conservateur.

Il ne pouvait donc être question de laisser aux gens du rénové la bride sur le cou. Sa mise en oeuvre a signifié, au contraire, un certain nombre de mesures bureaucratiques supplémentaires ( compliquées, de nos jours, par la prétendue obligation de faire des économies dans l'enseignement ).

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(1) Que nous avions exposés dans notre ouvrage La Réforme administrative des Ecoles, Bruxelles, Ed. de l'Institut de Sociologie, 1970, 80 pages.

Les professeurs de Gembloux - dont la majorité était acquise, d'enthousiasme, à ce nouvel enseignement - ont d'abord vu dans le rénové l'occasion de remplir quelques formulaires supplémentaires.
Une direction intelligente a cependant eu le souci de n'en pas remettre, alors que dans certains établissements qui ont dû se mettre, nolens volens, au rénové, on voit encore cohabiter les bulletins ancienne manière et les bulletins nouvelle manière!
Il n'empêche que la persistance des formes bureaucratiques a créé un certain frein à la réalisation complète des objectifs du rénové, a suscité à l'égard de cet enseignement la méfiance de professeurs autrement bien disposés, et empêché les directions d'écoles à se consacrer entièrement à leurs nouvelles tâches d'encadrement pédagogique. Cette situation ne semble pas avoir été aussi dramatique à Gembloux que dans d'autres établissements: cela est dû, sans doute, au fait que le préfet des études était lui-même un des " inventeurs " de l'enseignement rénové.

Rappelons encore que l'Athénée Royal de Gembloux a pu contenir les interventions du P.M.S. local dans les limites qui lui étaient normalement imposées: ce facteur a certainement contribué à alléger le sentiment de carcan bureaucratique. Les enseignants de Gembloux ne semblent guère accorder beaucoup de crédit aux initiatives des psychologues, alors que leur confiance en l'assistante sociale paraît mieux établie.

## E. Le contrôle des connaissances.

L'enseignement rénové a institué un nouveau mode de contrôle des connaissances, qui ne repose plus sur le mode habituel de notation ( les " cotes ", selon la terminologie belge ).
Un conseil de classe a pour mission de confronter les appréciations des professeurs, d'évaluer l'état de progression de chaque élève dans l'ensemble des matières, tout en tenant compte, d'autre part, des conditions sociales et psychologiques auxquelles l'élève est soumis. Les appréciations ne sont plus communiquées aux élèves sous forme de notes chiffrées, mais en termes de jugements littéraux, éventuellement commentés.

Le passage d'une classe à l'autre dépend également du jugement rendu lors du dernier conseil de classe de l'année. Les règlements prévoient quatre conseils de classe par an et par classe. A l'Athénée Royal de Gembloux, on s'en tient rigoureusement à ce nombre, car on y estime qu'il est inutile de multiplier des réunions qui, en nombre trop élevé, finiraient par sombrer dans le rituel et représenter, aux yeux des professeurs, un nouvel empiètement bureaucratique.

Le conseil de classe est d'abord le lieu où les professeurs parlent des élèves. Ceux-ci ne sont pas présents, mais le préfet des études nous a confié qu'il ne verrait pas d'inconvénient à voir les élèves du dernier degré ( qui ne relèvent pas de cette étude ) assister aux conseils. On essaye habituellement d'éviter le vote et de parvenir, au contraire, à des assentiments unanimes. Ce qui n'empêche pas le conseil de classe de servir parfois de théâtre à certains affrontements vigoureux. Une fois encore, il importe d'éviter une trop grande psychologisation de ces affrontements, et de s'en tenir - ce qui est constamment recherché à Gembloux - au primat de la pédagogie.

On s'efforce également de ne pas transformer le conseil de classe en instance judiciaire. Il est parfois apparu que des invitations à se rendre au P.M.S. étaient libellées de la manière suivante: " Comme suite au conseil de classe du..., vous êtes attendus au P.M.S. le ... ". Il est évident qu'on ne tient pas voir le conseil de classe jouer à Gembloux un rôle répressif. Les enseignants qui ont connu l'enseignement traditionnel ( dit actuellement: de type II ) peuvent avoir tendance à confondre conseil de classe et conseil de délibération, ancien style. Une fois encore, à Gembloux, la direction s'est efforcée, avec pas mal de succès, de pallier les inconvénients d'une telle expérience.
En second lieu, le conseil de classe sert également à évoquer des problèmes qui peuvent diviser les enseignants. A l'Athénée Royal de Gembloux, l'un des problèmes qui furent récemment soulevés fut celui de l'introduction de la politique dans les cours. C'est ainsi que s'est transporté, au sein d'une école de province, un débat très important, qui atteint la plupart des enseignants et des parents d'élèves. Rappelons qu'une majorité des enseignants de Gembloux sont syndiqués ( plus de 50 % au syndicat socialiste C.G.S.P. ). Ceci ne signifie pas pourtant que le corps enseignant soit fortement politisé, au sens militant du terme. Pour certains professeurs qui nous ont parlé de ce problème, il n'y a pas plus de raison de cacher son appartenance politique que de cacher son état civil ou la marque de sa voiture, à condition de ne pas se livrer à de la propagande. Cet avis est aussi celui du préfet des études, mais d'autres enseignants, au contraire, continuent à croire que la politique devrait rester à l'écart de l'école.
Cette opinion traduit surtout le désarroi de ces enseignants à l'égard de la chose politique elle-même, mal connue, mal comprise, mal digérée. Comment en parler aux élèves si on ne peut s'en parler à soi-même, a fortiori encore moins avec ses collègues?

Des enseignants ont regretté l'absence de politisation du personnel à l'athénée. Pour eux, cette politisation aurait pour résultat d'engendrer une solidarité suffisamment étroite pour permettre à la créativité, à son tour de se développer. Pour certains de leurs collègues, au contraire, l'enseignement rénové est déjà créatif par lui-même, et il serait dangereux de vouloir, par surcroît, y introduire la politique. Introduction qui reste de toute manière illégale, car l'enseignement de l'Etat vit toujours sur le régime de la neutralité définie il y a une quinzaine d'années par un ministre socialiste.

Quoiqu'il en soit, on voit bien que le conseil de classe n'est pas seulement une manière de commission de contrôle destinée à traiter autant de " cas " qu'il y a d'élèves, mais qu'il sert aussi aux professeurs à préciser leurs options, à s'affronter éventuellement sur des problèmes pédagogiques ou même extra-pédagogiques, à faire l'apprentissage du travail en commun.

On revient à l'idée que l'enseignement rénové a aussi pour mission d'éduquer les enseignants à un nouveau type de relation pédagogique. Pour les enseignants les plus impliqués dans le rénové à Gembloux, le rénové a parmi d'autres mérites celui de réintroduire le risque, alors que l'enseignement traditionnel finissait par étouffer les professeurs sous la sécurité. A cette sécurité à la longue inquiétante, ils ont préféré un risque qui leur paraît plus fructueux.

Cette insécurité positive n'est pas ressentie de la même manière par tous les enseignants. La branche qu'ils enseignent, notamment, joue ici un rôle important.
On pourrait dire, une fois de plus, que les professeurs de français sont privilégiés à cet égard. Le risque qu'ils prennent a pour contre-partie une possibilité de création que ne connaîtra jamais le mathématicien, par exemple, du moins tant que les mathématiques s'enseigneront comme on les enseigne à l'heure actuelle. Du reste, les professeurs de mathématiques perçoivent difficilement leur rôle de " sélectionneurs " privilégiés. Ils se veulent progressistes dans la mesure où la mathématique moderne leur apparaît comme un progrès. A la différence du professeur de français, qui a la possibilité de faire entrer la vie sociale dans ses cours - ce que peut aussi faire le professeur de langues, même de latin, ou le professeur de sciences - le professeur de mathématiques n'a guère d'autre choix que de se retrancher derrière le programme. Cette situation peut paraître rassurante aux timorés. Elle peut aussi représenter un sérieux handicap pour les esprits imaginatifs. Cette difficulté était bien ressentie à Gembloux.

## F. La préparation au travail

Dans la portion d'enseignement rénové qui nous intéresse, cohabitent des sections de rénové long ( de transition ) et de rénové court ( de qualification ).
Les finalités de ces deux types d'enseignement sont forcément différentes: le rénové long destiné aux études supérieures, tandis que le rénové court destiné au marché du travail. Les professions auxquelles on forme concernent les travaux subalternes de bureau. Cette finalité n'est guère éloignée de celle des anciennes sections A6/A3, où l'on formait surtout des sténo-dactylos.

Il semble évident aux professeurs de Gembloux qui travaillent dans les sections de qualification que les élèves viennent y chercher effectivement une formation professionnelle. Il ne leur est pas apparu que les enfants de quinze ans ne s'intéressent pas à leur future situation de travail, ou rejettent purement et simplement l'idée qu'il faut travailler pour vivre. De leur côté, les enseignants ne perdent pas cette obligation de vue. Ils s'efforcent de faire entrer le monde du travail dans leurs cours, par des visites dans les entreprises, par le choix des sujets, par la sélection de textes appropriés - éventuellement un article de journal sur les accidents de travail. Ils sont toutefois plusieurs à regretter que leur formation, une fois de plus, et l'information qu'ils peuvent obtenir, ne leur garantit pas que leur " approche " de la vie professionnelle est pertinente dans tous les cas. Et puis, ramener tout l'enseignement à la préparation professionnelle, n'est-ce pas conditionner les élèves à ne pas entrevoir d'autre destinée que le métier auquel les cours sont censés les former?

Ajoutons une dimension circonstantielle à cette formation professionnelle. La Wallonie, à laquelle Gembloux appartient, ressent davantage encore que d'autres régions les effets de la crise. Ses structures industrielles ont fort vieilli, et sa démographie est plus qu'essoufflée.
Dans de telles conditions, le premier contact des jeunes gens et jeunes filles sortant de " qualification " avec le marché du travail risque bien de se réduire à une visite à l'une des officines de l'Office National de l'Emploi ( O.N.Em.), organisme qui enregistre les chômeurs. Divers professeurs sont très conscients de cet état de choses, et se rendent bien compte que tous leurs efforts pour faire entrer dans la population active des travailleurs bien formés ( et non seulement " qualifiés ", mais aussi " éduqués " en tant que citoyens et consommateurs ) peuvent être frappés, vu la situation économique ambiante, de dérision. Aussi la tentation est-elle vive de donner à certains cours une tournure plus

critique, d'y mettre l'accent sur les réalités de la crise, d'en dénoncer les " vraies " responsabilités. Le débat sur l'introduction de la politique à l'école revient, par ce biais, sur le tapis.

On pourrait croire que les classes de transition ( rénové long ) ne posent pas le même problème aux enseignants. En effet, les élèves auxquels ils ont affaire se destinent normalement aux études supérieures, c'est-à-dire à l'université ( la " voie royale " de l' "élite" ) ou aux écoles d'enseignement supérieur non universitaire: normal ( instituteurs ou régents ), technique ( ingénieur technicien ), économique ( secrétaire de direction ), social ( assistant social ), artistique ( architecte ), paramédical ( infirmière ), etc. L'université, en principe, est réservée aux meilleurs. Depuis la loi de juin 1964 sur l'équivalence des diplômes de l'enseignement secondaire en vue de l'entrée à l'université, l'accès aux facultés s'est théoriquement démocratisé. On sait ce qu'il en est en réalité: le facteur de discrimination culturel continue à jouer pleinement son rôle, et il ne semble pas que la généralisation de l'enseignement rénové puisse contribuer fortement à atténuer ses effets. Nous espérons évidemment nous tromper sur ce point.

Mais les enseignants s'en tiennent généralement à une vision mythique de l'université. S'ils sont passés par elle, ils n'en ont retenu que leur faculté et leur section, et le type d'études qu'ils ont suivies. L'université n'a pas pour habitude d'enseigner une vision globalisante et critique d'elle-même. Elle pratique les cloisonnements et cultive les antagonismes: le philologue, dès lors, sait bien peu de choses sur le physicien, et vice-versa. En outre, le licencié agrégé n'entrevoit guère que de manière très rudimentaire le rôle social que joue l'université. Pour lui, qui est appelé à en perpétuer le culte, l'université reste le creuset et le conservatoire de la vraie culture ou de la vraie science. Il est rare qu'il ait aperçu que l'université est aujourd'hui bien échue, et que le piédestal sur lequel elle prétend qu'on la hisse encore est en grande partie usurpé.

Quant à l'enseignant formé à l'école normale, l'université lui apparaîtra le plus souvent comme le symbole d'une nostalgie, quand ce n'est pas d'une hostilité avouée. Les positions défensives corporatistes adoptées par les licenciés à l'égard des régents, ces derniers temps, ne peuvent guère contribuer à améliorer les choses.

Quant aux institutions non universitaires, la plupart des enseignants n'en ont qu'une connaissance vague et imprécise. A la rigueur, les régents peuvent parler de l'école normale, mais on doute que ce puisse être en termes enthousiastes.

Les autres écoles supérieures sont peu connues dans les établissements secondaires qui, traditionnellement, ont toujours eu les yeux fixés sur l'université.

Les enseignants du secondaire ne connaissent pas très bien non plus les professions auxquelles conduisent les études supérieures, celles qu'on peut faire à l'université incluses.Seule celle de professeur leur est bien connue. Mais il faut souligner combien est périlleuse la mission d'orienter des jeunes vers l'une ou l'autre carrière, dans la mesure où le marché de l'emploi ne peut jamais faire l'objet de prospectives sérieuses, et où pas mal de professions sont elles-mêmes en crise, et doivent passer par une révision parfois déchirante des valeurs qui les sous-tendent. Il est clair que les professeurs ne peuvent guère s'attendre, dans ce domaine, à une aide substantielle de quelque organisme extérieur.

## G. La quotidienneté scolaire.

Il convient de dire encore quelques mots des rapports quotidiens entre les élèves et les professeurs. L'enseignement rénové, contrairement à ce que certains de ses détracteurs ont voulu prétendre, n'a pas apporté l'anarchie dans les écoles. Mais il était inévitable que, basé en principe sur les capacités de création des élèves, il s'accompagnât d'un certain allègement des contraintes scolaires traditionnelles. L'établissement qui applique le rénové ne peut plus ressembler à une caserne. Dès lors, il y a eu, dans les écoles qui ont pris le rénové au sérieux, un sensible adoucissement de la discipline ( d'autres ont dit: relâchement ). Cet adoucissement explique sans doute une partie de l'hostilité publique à l'égard du rénové.

Pour de nombreux parents, l'école doit aussi former le caractère, et on n'y arrive bien qu'en imposant aux élèves la pratique de la soumission et du renoncement. Les âmes d'élite, on l'a dit assez, se forgent dans l'adversité. L'enseignement rénové, qui prétend intéresser, voire amuser les élèves, ne pouvait s'en tenir à cet héritage des collèges impériaux.
Les rapports entre les élèves et les professeurs se devaient d'être plus francs, plus ouverts, et débarrassés de tous les arbitraires qui ont terrorisé de nombreuses enfances. Il fallait aussi que les rapports entre les professeurs et la direction se fissent plus détendus, moins " stressants " qu'ils ne l'ont souvent été dans les écoles traditionnelles. Discipline stricte des élèves et domestication des professeurs allaient évidemment de pair. Les professeurs qui avaient une mentalité de " petit chef " se sentaient à

l'aise dans l'ancien régime des écoles. L'enseignement rénové, on l'a déjà vu, a introduit le risque. Ce qui signifie aussi le risque de relations sociales plus directes et, partant, plus dangereuses, car capables d'amener l'enseignant à se mettre en cause lui-même.

L'Athénée Royal de Gembloux nous a semblé être bien engagé dans la voie de ces relations sociales nouvelles. Les rapports entre les enseignants et la direction sont bien moins tendus que dans maints établissements du même genre, et les rapports entre les élèves et les professeurs sont empreints de ce nouvel esprit de spontanéité et d'égalitarisme. On n'en est cependant pas arrivé à une permissivité totale. Les professeurs de Gembloux, même les plus progressistes d'entre eux, ne veulent pas sombrer dans une démagogie facile - qui leur aliénerait d'ailleurs la majorité des parents. L'école reste l'école: son cadre institutionnel, sa configuration matérielle, et aussi les obligations créées par ses relations avec le monde extérieur, imposent le respect de certaines contraintes.

Si les conflits, à Gembloux, se résolvent plutôt par voie de négociation que par l'intervention pure et simple d'une autorité indiscutable, les membres du corps enseignant n'entendent pas, au sein de l'Education Nationale, jouer aux promoteurs d'une petite république scolaire, du genre Summerhill. Il n'empêche que l'impression qui se dégage de visites à l'athénée royal de Gembloux est celle d'une belle tolérance et d'une grande capacité d'échanges entre les différents acteurs en présence.

Parmi les contraintes auxquelles l'école doit se plier, on soulignera le relatif dénuement matériel. Les bâtiments sont dispersés et assez vétustes en partie, ou insuffisants.
De nouvelles constructions se font attendre, mais l'intendance ne suit pas bien l'innovation pédagogique. Celle-ci a pourtant pu se produire sans trop de heurts, ce qui prouve bien que ce n'est pas dans les plus beaux châteaux qu'on pratique la meilleure hospitalité. Il n'empêche que le rénové implique aussi un environnement favorable. Celui-ci n'est pas encore réalisé à Gembloux. Diverses initiatives s'en trouvent certainement freinées, et on ne peut que le déplorer.

## III.- LES TACHES DES ENSEIGNANTS

Les professeurs consacrent une partie de leur temps à d'autres activités que ce que l'on appelait " la classe ". On aura pu lire plus haut que l'introduction du rénové avait entraîné un certain gonflement des tâches administratives. A Gembloux, cependant, la direction a veillé à ne pas verser dans trop de bureaucratie. Mais le Ministre, évidemment, ne témoigne pas toujours de la même compréhension.

Nous allons passer ces diverses tâches en revue, de manière forcément assez succincte.

### A. Tâches administratives proprement dites

La part la plus importante de ces tâches consiste en la préparation des conseils de classe, l'assistance à ces conseils, et l'exécution des décisions qui y sont prises. Rappelons qu'on n'a pas pour habitude, à Gembloux, de multiplier les conseils de classe au-delà de ce qui est règlementaire. Les enseignants jugent ces réunions très intéressantes, et acceptent volontiers les tâches qui en découlent. Certaines de ces tâches, d'ailleurs, ne concernent pas uniquement les élèves. Mais il s'agit alors plutôt de tâches d'auto-formation personnelle que de travaux administratifs.

Parmi les autres tâches administratives figurent les obligations incombant aux titulaires de classe, celles qui incombent au coordinateur, ainsi que celles qui reviennent aux professeurs qui font partie du secteur coordonné. Sauf pour ces dernières, ces tâches entraînent des allègements de prestations hebdomadaires, en termes d'heures de cours à donner.

Rappelons en passant que les charges hebdomadaires constituant une fonction à plein temps varient selon qu'on est agrégé de l'enseignement secondaire supérieur ( A.E.S.S. ), c'est-à-dire porteur d'un titre de licencié universitaire (1), ou agrégé de l'enseignement secondaire inférieur ( A.E.S.I. ), c'est-à-dire régent issu d'une école normale* Dans le premier cas, la norme est de 16-18 heures, dans le second de 21-23 heures.

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(1) L'agrégation - épreuve assez simple - s'obtient éventuellement lorsqu'on est déjà porteur du titre de licencié. Il s'agit de deux titres différents. L'agrégation est nécessaire pour être nommé dans l'enseignement.

* Cependant, si un "régent" enseigne dans un niveau d'enseign ment où c'est normalement un diplôme de "licencié" qui est requis, ce sont ces dernières normes qui s'appliquent à lui. L'inverse est également vrai ("licencié" occupant un poste de "régent").

Une attention particulière doit être accordée à la confection des horaires. Celle-ci doit respecter des règles assez impératives: on ne peut pas répartir les heures d'éducation physique, par exemple, selon la fantaisie, les souhaits des professeurs, ou les disponibilités matérielles. A l'Athénée Royal de Gembloux, le soin de mettre au point les horaires - tâche ardue s'il en est, et qui réclame une minutie et une patience de bénédictins! - est confié à une commission de professeurs. Elle est chargée de recueillir l'avis de tous les collègues avant de se mettre au travail. Les horaires ne procèdent donc pas uniquement de la volonté de la direction. Le préfet des études, en n'y consacrant pas l'essentiel de son énergie en début d'année scolaire peut donc accorder à ses obligations pédagogiques et à ses fonctions de relations publiques - fort lourdes à cette période - toute l'attention qu'elles méritent.

Les professeurs n'interviennent pas directement dans l'élaboration des programmes d'études.(1) Néanmoins, on a vu que certains d'entre eux étaient relativement privilégiés à cet égard ( professeurs de français ), et que certains autres bénéficiaient d'une procédure de coordination ( professeurs de langues germaniques ). En outre, le rénové laisse aux enseignants une plus grande latitude que par le passé dans le choix des sujets de cours et des illustrations ( textes ) éventuelles. Les professeurs de latin ou de grec peuvent ne plus s'en tenir aux seuls textes classiques, et choisir de parler surtout de la civilisation romaine ou grecque, à travers divers textes qu'ils composent eux-mêmes ou qu'ils glanent de divers côtés. Cette pratique est usuelle à Gembloux, où l'on n'a pas le culte des humanités classiques au point de ne pas vouloir toucher aux monuments qui naguère les illustraient encore.

## B. Préparation du travail des élèves

Certaines de ces tâches sont traditionnelles: préparation des leçons à faire, recherche de la documentation, élaboration des moyens de contrôle des connaissances, etc. Dans la mesure où l'enseignement rénové implique une plus grande ouverture sur l'extérieur, le professeur est également amené à accomplir diverses tâches supplémentaires, et notamment:

- arranger les contacts de la classe avec l'extérieur de l'école: entreprises, organismes divers;
- inviter des personnalités extérieures pour présenter certains aspects de la matière et/ ou de la vie professionnelle;

(1) Cependant, au niveau national, les programmes sont préparés par des commissions dans lesquelles les professeurs siègent en majorité.

- se concerter avec des collègues intéressés pour entreprendre un enseignement en commun ou coordonné.

La faiblesse des ressources en secrétariat des écoles secondaires contraint très souvent les professeurs à mettre eux-mêmes la main à la pâte. Ce qui ne va pas sans soulever quelques difficultés, les enseignants n'étant guère préparés, dans leurs études, à jouer un rôle de relations publiques.

Le sous-équipement administratif des écoles, notamment en personnel qualifié, constitue certainement l'un des obstacles majeurs à un fonctionnement réellement harmonieux de l'établissement. Le personnel dit " auxiliaire d'éducation " n'est pas si auxiliaire qu'on le prétend. A Gembloux, il a tendance à moins s'occuper d'éducation, au sens répressif du terme, que de " logistique ". L'enseignement rénové a, parmi d'autres résultats positifs, entraîné la disparition du " pion " de jadis.

## C. Utilisation du matériel pédagogique

L'enseignement rénové n'exige pas un matériel pédagogique particulièrement sophistiqué. Certes, les moyens audio-visuels sont entrés dans l'école, mais il s'agit là d'une tendance générale. Comme dans d'autres établissements, à Gembloux, les professeurs sont responsables du matériel qu'ils utilisent dans leurs cours. Ils n'ont en général pas à se préoccuper des achats ou des entretiens, tâches qui reviennent à l'administration de l'école. Il n'est évidemment pas exclus qu'ils utilisent leur matériel personnel.

## D. Supervision du travail des élèves

Le rénové s'efforce de grouper les élèves en équipes au sein des classes. L'évaluation porte sur le travail d'équipe, avant d'être traduite en évaluation personnelle ( devant le conseil de classe ). L'enseignant doit pouvoir apprécier les effets de groupe avant de réduire son jugement à chaque élève en particulier.

Il n'existe pas de supervision personnelle des élèves, c'est-à-dire que l'enseignement n'est pas individualisé, sauf lorsqu'un rattrapage est organisé.

Les programmes d'études ne font pas l'objet d'une évaluation permanente. Celle-ci n'est pas organisée de manière institutionnelle. Mais il est loisible, à certains enseignants, de " rectifier le tir " lorsque le programme semble ne pas correspondre aux capacités et/ ou aux motivations des élèves. Cette latitude est d'autant plus large qu'il s'agit d'un cours sur lequel l'enseignant possède une prise suffisante pour organiser son travail plus ou moins librement: cours de français, par exemple.

Il nous a semblé que certains enseignants, à cet égard, font preuve d'une relative pusillanimité. D'autres cours que le cours de français peuvent aussi se prêter aux infléchissements envisagés par le professeur qui connaît bien les élèves qui lui sont confiés. Des professeurs de langue, par exemple, se sentent encore trop enfermés dans des programmes traditionnels. Il est certain que l'exemple de collègues plus " libérés " pourrait être contagieux. La direction de l'Athénée Royal de Gembloux encourage cette contagion, mais il faut tenir compte des conditionnements divers, notamment de l'image que les professeurs ont gardé de leur propre passage dans l'enseignement secondaire. C'est pour cette raison également que des professeurs avaient souligné combien il était avantageux, tout compte fait, de n'avoir jamais travaillé dans l'enseignement secondaire traditionnel ( de type II ).

## E. Contacts personnels avec les élèves

Ces contacts ne sont ni institutionnalisés ni fort répandus. Des enseignants qui habitent la région peuvent retrouver leurs élèves en certaines occasions, et nouer avec eux des contacts moins formels. N'oublions cependant pas que Gembloux est une petite ville de province, et que l'athénée est une école mixte.

Il ne nous est pas apparu que les professeurs de Gembloux souhaitaient une multiplication de ces contacts. Les rencontres au sein de l'établissement leur semblent habituellement suffisantes. Il convient de noter que la population scolaire de Gembloux, d'une manière générale, n'est pas une population " à problèmes ". Le " parrainage " n'existe pas. Si les élèves sont " suivis " et font l'objet d'interventions spécifiques en réponse à leurs problèmes particuliers, c'est le plus souvent en fonction de délibérations prises dans le conseil de classe. Pour les cas résistant au simple dialogue, le P.M.S. peut être sollicité.

## F. Contacts avec les parents d'élèves et d'autres adultes

La plupart du temps, ces contacts restent formels. Ils ont lieu à l'occasion des réunions de parents organisées par la direction de l'école. A Gembloux, on nous a confirmé ce que nous avons déjà entendu dans de nombreuses autres écoles, à savoir que c'est toujours la même minorité de parents que l'on retrouve lors de ces réunions, et il se trouve que c'est en général des parents d'élèves sans problèmes qu'il s'agit. Ces réunions permettent au narcissisme parental de s'exprimer, dans la mesure où les parents viennent se faire confirmer les bonnes qualités scolaires de leur progéniture.

Une Association de Parents ( A.P. ) est associée à l'Athénée Royal de Gembloux. Elle fait partie de la Fédération des Associations de Parents de l'Enseignement Officiel ( F.A.P.E.O. ), dont elle reçoit les directives. Cette Association de Parents est relativement active, et entretientde bons rapports avec l'athénée. Son champ d'activités recouvre essentiellement le para-scolaire. En règle générale, l'Association de Parents n'intervient guère sur des questions de pédagogie.

Pour ce qui est des autres adultes, mis à part les inspecteurs et les visiteurs invités à l'école, les enseignants ne sont guère amenés à les rencontrer de manière institutionnelle. La direction a été contrainte récemment d'avoir des contacts avec les autorités judiciaires, dans la mesure où le parquet de Namur, la grande ville proche, sur l'instigation de certains milieux de parents, avait entrepris une grande opération de ratissage des cafés de la région, afin d'en déloger les élèves en rupture de classe. Cette affaire n'a pas été traitée de manière dramatique à Gembloux, où il s'agissait surtout d'élèves de dernière année entraînés par les étudiants de la Faculté d'Agronomie. La direction de l'athénée a veillé à ne pas dramatiser ces interventions, parfois intempestives, des autorités policières et judiciaires.

Quant aux contacts qu'ont les enseignants entre eux, nous avons déjà eu l'occasion d'en traiter assez largement dans divers passages de ce rapport.

## G. Activités de formation permanente

Les enseignants de Gembloux nous ont affirmé que les débuts de l'enseignement rénové avaient entraîné l'obligation, pour eux, d'assister à de nombreux recyclages. Ceux-ci sont désormais moins nombreux. La direction de l'Athénée Royal de Gembloux s'efforce de laisser aux professeurs la possibilité de s'inscrire à des recyclages libres, en leur accordant des heures de congé, des facilités d'horaire, etc. Cette attitude témoigne, faut-il le dire, d'un libéralisme assez peu courant en la matière.

On a déjà souligné, plus haut, la nécessité pour les professeurs de se tenir au courant de la modernité. A cet égard, on ne peut pas dire qu'ils disposent d'un soutien institutionnel considérable, hormis quelques publications de l'Education Nationale ( dont une revue mensuelle pas toujours jugée très favorablement ). Mais il est vrai que l'obligation qui leur est faite de se débrouiller par leurs propres forces est aussi un facteur d'innovation dans l'enseignement.

Les enseignants de Gembloux que nous avons rencontrés avaient le sentiment d'être des acteurs de changement. Mais ce changement devait résulter de multiples tâtonnements, en raison de la force des choses. Contrairement à ce qu'on pourrait attendre, leur intervention dans des programmes de recherche ne peut être que fortuite. L'enseignement secondaire est un monde assez fermé, dont on ne sort pas aisément. Il n'existe guère de communication avec la recherche universitaire, sauf dans des cas marginaux.

## H. Activités au sein de la communauté

Les enseignants de Gembloux ne jouent guère de rôle particulier dans l'animation culturelle de la ville. Gembloux ne présente d'ailleurs aucune particularité notable du point de vue culturel.

Cependant, la direction de l'Athénée veille à ce que l'école soit à la disposition de groupes de citoyens qui en font la demande. Mais ses propres professeurs n'interviennent pratiquement pas au sein des groupes demandeurs.
N'oublions pas qu'un nombre appréciable d'enseignants de Gembloux n'habitent pas la région.

## IV.- QUELS ENSEIGNANTS?

Les professeurs de l'Athénée Royal de Gembloux travaillent dans des conditions matérielles qui ne diffèrent guère sensiblement de celles qui étaient de règle dans les établissements traditionnels. Les bâtiments de l'athénée sont en partie vétustes, en partie inadaptés aux besoins d'un enseignement vraiment innovateur. Les ressources matérielles, sans être misérables, ne comprennent pas des gadgets électroniques compliqués, des laboratoires équipés comme dans des centres de recherches, des moyens audio-visuels en surnombre. Les élèves qui viennent à l'athénée sont mûs par le désir d'acquérir des connaissances, les uns en vue d'arriver sur le marché de l'emploi avec un bagage monnayable, les autres en vue d'aborder l'enseignement supérieur dans des conditions culturelles satisfaisantes. Les élèves sont groupés en classes, mais peuvent être répartis en équipes. Les vieux schémas n'ont cependant pas disparu. Les cycles du rénové comprennent en tout six années, et l'enseignement qu'on y dispense correspond à une rationalité qui ne fait pas nécessairement la part belle aux motivations des élèves.

Dans ces conditions, quelles sont les aptitudes requises des enseignants qui travaillent à l'Athénée Royal de Gembloux?

### 1° Aptitudes à l'égard des élèves:

Les professeurs de Gembloux, dans l'ensemble, s'efforcent d'accepter les élèves comme ils sont. Ils font reposer leur démarche pédagogique sur la recherche de la personnalité réelle de chaque élève. C'est pour cette raison que la période d'accueil est consacrée à l'étude des motivations des élèves, de leur environnement familial, de leurs représentations de leur vie future. L'élève n'est plus une abstraction, mais un être individualisé, qu'il ne faut forcer à entrer dans un moule préétabli, mais dont il faut, au contraire, valoriser au maximum les potentialités et les choix personnels. C'est peut-être là l'essence même de l'enseignement rénové, qui fait appel, chez l'enseignant, à des dispositions de tolérance, d'ouverture à autrui, d'empathie que les études pédagogiques ne mettent pas toujours en exergue.

### 2° Aptitudes à l'égard des autres enseignants:

L'Athénée Royal de Gembloux, pour pionnier de l'enseignement rénové qu'il est, reste quand même un établissement d'enseignement secondaire soumis à l'administration bureaucratisée de l'Education Nationale.

Les rapports entre les enseignants restent encore assez formels, bien que le conseil de classe joue un rôle d'entraînement à la communication et à l'échange assez important. Les enseignants sont amenés à y faire preuve de capacités d'écoute et d'argumentation que l'enseignement traditionnel ne mettait guère en valeur. Ajoutons que l'antagonisme entre licenciés et régents nous a semblé fort atténué à Gembloux.

3° Aptitudes à l'égard des autres adultes:

L'enseignant dans le rénové est appelé à être le propagandiste de ce type d'enseignement, mais à Gembloux, où les contacts entre l'athénée et la population de la ville, parents d'élèves y compris, restent assez rares et formels, cette tâche ne s'impose guère aux professeurs.
Plus intéressants sont sans doute les rapports entre les enseignants et la direction de l'établissement, qui reposent sur la capacité d'animation du préfet des études, et sur l'acceptation, par les enseignants, de responsabilités plus ouvertes, moins protégées par les aspects rassurants d'une autorité qui s'affirme comme telle. Les enseignants sont donc appelés à choisir tout seuls des voies d'information et de communication personnelles. Pour certains d'entre eux, formés par l'enseignement traditionnel-qui admet le conflit permanent avec la direction, en tant qu'il garantit la " prudence " des professeurs-, l'exercice des responsabilités n'a pas laissé de leur poser certains problèmes.

4° Aptitudes à l'égard d'eux-mêmes:

L'enseignant du rénové doit constamment être à l'affût du monde extérieur à l'école, afin que celui-ci pénètre dans son enseignement. La qualité essentielle devient alors la curiosité, si peu sollicitée, en général, au cours des études supérieures. L'innovation doit remplacer le psittacisme, ce qui veut aussi dire que l'incertitude doit prendre le pas sur les certitudes des programmes et des leçons-types. En même temps, le professeur doit affiner ses capacités d'expression, doit apprendre à étudier un dossier, à résumer rapidement un problème ou une situation. Il nous a semblé que l'Athénée Royal de Gembloux offrait de grandes chances à ses enseignants de parvenir à de tels objectifs.

L'Athénée Royal de Gembloux n'est peut-être pas une école modèle. Il nous est néanmoins apparu que l'enseignement rénové y avait un terrain d'élection, principalement grâce à l'attitude stimulante de la direction. L'enthousiasme de quelques enseignants possédant des dons pédagogiques exceptionnels s'est révélé contagieux. Tout en conservant à l'enseignement rénové, encore à ses débuts, tous ses aspects empiriques, ils sont parvenus à en faire autre chose qu'une réforme sur papier, mais bien à lui conférer un contenu vivant, qui devrait sans doute chercher, à présent, à déborder sur la communauté qui entoure l'école. Mais les résistances, faut-il le dire, ne sont pas nécessairement là où l'on croit les trouver.

# NORWAY

## LANDØYA LOWER SECONDARY SCHOOL
## A CASE-STUDY

by

Birgit Brock-Utne

# Acknowledgement

My sincerest thank goes to the staff of Landøya lower secondary school especially its head, Hanna Marit Jahr, without whose kind cooperation this exercise had not been possible.

Any shortcomings or weak points are entirely on my side.

Oslo, August 1976
Birgit Brock-Utne.

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# I INTRODUCTION.

## (i) Characteristics of the school:

Landøya lower secondary school is the object of the following case-study. The school is situated on the outskirts of Oslo, in a well-to-do suburbian area in the municipality Asker, west of Oslo. Asker is one of the wealthier municipalities in Norway.

Landøya lower secondary school (ungdomsskole) covers the grades 7,8 and 9 of our nine year compulsory school. The school is fairly new. It was opened and received its first pupils in the autumn of 1972. In the school-year 1975/76 there are 289 pupils attending Landøya school. Of these pupils 100 attend the 9th grade, 99 the 8th and 90 the 7th grade. This normally would constitute 11 classes. As we shall see later on, the school seldom operates in traditional classes. The school is built to give room for 12 classes.

On leaving the lower secondary school, pupils are given marks in most subjects. Final marks are earned before the end of the 9th grade only in home economics ( 7th grade ) and music and crafts (8th grade). The marks are partly based on tests, mostly teacher-made, taken during the year. They are also based on the over-all impression teachers have got of a pupil watching him participate during the year in various activities. The subjects are divided into written and oral subjects. The pupils know that in the written subjects Norwegian, ( we have two very similar official Norwegian languages, and an examination may be given in any one of these ) Mathematics and English there may possibly be an external examination at the end of the ninth year. It is likely that there will be one in one or more of these subjects. There may also be an examination in one of the oral subjects, but such an official oral examination is seldom given at this level of education.

The Council for Compulsory Education, which serves as a government-appointed advisory body to the Ministry of Church and Education, each year decides which of the three above-mentioned subjects shall be chosen for for an external examination. It may decide that an official examination be given in all the written subjects, but it is more likely to select one of them. The Council also selects which counties are going to get the same official examination. The examination is prepared by the Council. The previous tests constructed by this Council will constitute important background material when pupils are preparing for their final exams on leaving the nine year school.

In some districts in Norway, where not all of those applying to get into the higher secondary school will be able to get in there, the marks earned in the lower secondary school carry a greater importance than they do in the districts around Oslo. But uptill now certain requirements had to be met such as having taken a second foreign language ( in most cases German, only a few lower secondary schools offer French as a choice ) to get into the theoretical branch of the upper secondary school - which again was a prerequisite for studying at the university. This system of requirements is now being modified.

(ii) Characteristics of pupils:

Since the entering school-age in Norway is seven, most of the pupils entering Landøya will be thirteen. On leaving the school the pupils will be sixteen. All of the pupils have gone through six years of primary school before entering the lower secondary school. Approximately half of the pupils attending

Landøya come from a rather traditional primary school e .g. traditional when judged from the outside. That school is an old corridor-school with fixed walls. But the teachers have been able to use progressive educational ideas in spite of the hampering architecture. The other half of the pupils come from an open-plan school. The teachers there also try to create an open education. It is not possible to observe great differences between the two groups of pupils on their arrival at Landøya. The teachers seem to have noticed that the ones coming from the open-area school are somewhat more noisy than the ones from the traditional school. But both groups of pupils are used to group work and have had some training in studying techniques.

On leaving Landøya 60-65% of the pupils enter the theoretical branch of the nearest upper econdary school. This school is a traditional school both judged by its architecture and by the life going on inside its walls. For the pupils coming from Landøya the transition to this school must be, and indeed often is, a frustrating experience. Only 1-2% of the other pupils do not seek any further schooling immediately after having gone through the ninth year of compulsory schooling at Landøya. The rest of the pupils enter various practical branches of the upper secondary school. Mostly they will find there an atmosphere more like the one they have been accustomed to at Landøya than their fellow school-friends attending the theoretical branch of the higher secondary school find in their new school. The practical branches are various types of vocational schools. The school of Commerce, which is chosen by quite a few of those choosing practical or vocational training, is a partly open-plan school.

The pupils attending Landøya are recruited from the nearest geographical district. So far the recruitment is not selective. The pupils are representative of the type of people living around Landøya. But they are far from representative of all the social classes living in Norway. Their parents belong to the middle and mostly upper middle classes in Norway. They live in nice one-family houses surrounded by a garden.

## (iii) Characteristics of innovation.

Landøya lower secondary school is an open-plan school. But as we know the open architecture in itself does not necessarily lead to educational innovation. It is the teachers - with the head-master playing a central part - who decide whether or not the open schools will be filled with an open education. At Landøya the teachers, under the leadership of their headmistress Hanna Marit Jahr, decided to try to get the openness also into their teaching and the learning process. The innovation which will be described here has to do with the relationships this school has managed to create among teachers, between teachers and pupils and among pupils. Slogans like participation in important decisions by all concerned, self-management, democracy in school are here more than slogans. One sees these ideals put into practice. These ideals have high priority in the authorised Curriculum Handbook for the Norwegian nine-year school. But one seldom sees staffs in Norwegian secondary schools trying to fulfill these ideals as diligently as is being done at Landøya.

The staff - including the head-mistress - had the advantage of starting new and unknown to each other with this brand new school in the autumn 1972. Here is our school. What sort of activity do we want to be going on in it?

The staff reviewed the ideals set up for our compulsory schooling by our Parliament and described in the Compulsory School Law and in the authorised Curriculum Handbook. There is a host of ideals in these texts. The staff started out to discuss them. Which ones would they give the highest priority and concentrate on putting into practice immediately? They started out with a priority list which runs as follows:

- security and enjoyment
- independence
- cooperation between teachers and between pupils
- the learning of skills and the gathering of information

Having picked out these ideals as the ones they wanted to start working to fulfill right away, the staff discussed how these ideals could be put into practise. How should the teaching and learning process be organised to fulfill these ideals?

The staff found that should the pupils feel secure in their school, it would be necessary that each single one of them had his own home-base somewhere in the school, had a group of fellow pupils and some special teachers he could feel attached to. The teachers' own feeling of security could best be assured by cooperation and a high degree of sharing and openness between the teachers themselves. The teachers soon decided that they did not want to follow the pattern which still is most common in the Norwegian lower secondary schools to-day: that each teacher works in splendid isolation, and keeps his ideas, successes and failures for himself. They settled for team-teaching.

Should the pupils be able to feel attachment to certain teachers and certain fellow pupils, it would be necessary that each pupil be confronted only with a small number of teachers, e.g. the teachers would have to cover several subjects or at least be willing to handle rather broad problem areas. The staff also found it to be important that the pupils had a rather small group of fellow pupils whom they met frequently. They did not want to foster any kind of ability grouping - this being against the social ideals of our school. The groups therefore are heterogeneous groups covering a wide range of ability.

The staff felt that if they wanted their school to be an open, democratic school, they would also have to share administrative responsibilities like decision-making concerning time-tabling and the organization of the school-day. Furthermore it has been an objective to have the pupils participate in preparing curricula and organizing learning activities. This objective has lead to an ever increasing amount of time being set aside for project work. The time-table at Landøya consequently differs a good deal from the lesson- and subject-divided ones which one still usually finds in lower seconday schools elsewhere.

What characterises this school is the innovative atmosphere one finds in the staff. The head-mistress with her enthusiasm and optimistic outlook plays no minor part in creating this atmosphere.

The experiments going on in the school are planned by the staff and evaluated by them. After the first group of pupils had gone through all their three years at Landøya a survey was made of their attitudes towards the teaching methods used, the various groupings tried out . This survey was a rough and ready instrument made up by the staff itself. The staff wanted this evaluation of their work as a feed-back to themselves. There was no external demand for an evaluation of this type.

What makes Landøya a good object for a case-study of this type is that the experiments going on in this innovative school all are conducted within the frame of the authorised Curriculum Handbook and the Law of the nine-year school. The staff is only somewhat ahead of other staffs in putting into practice objectives which belong to the official school policy.

## (iv) Characteristics of teachers:

The whole idea of the innovation the teachers at Landøya are engaged in implies a team-teaching in which the teams are composed of teachers of varying backgrounds. This fact - that the teachers constituting the teams do not have their education in and usually do not teach the same subject - is often difficult for foreigners visiting the school to understand. They are often used to a teacher training in which the teachers are trained mostly in one subject. And they are used to team-teaching in which teachers having the same subjects cooperate, dividing the students between them and making material together.

At Landøya the idea is that the pupils shall gain a high degree of security by being able to know their teachers well. This idea implies the use of a small number of teachers for a group of pupils. Three teachers constitute a team and these three teachers cover almost all the subjects the pupils have. They have the responsibility for 60 students. The teachers, having almost all of their teaching load with these sixty pupils, get to know these pupils very well. They know who is the friend of whom, what the families of the pupils are like, who has what type of difficulties.

Usually the teams are constituted of one teacher who has Mathematics and some other subjects, one who has English and some other subjects and one who has Norwegian and other subjects. It is an advantage for the school to have teachers who are broadly trained and are able to cover several subjects. The teachers trained at the University have three subjects while those trained at the Teachers Colleges have basic courses in all subjects and more profound knowledge of three to five subjects.

The teams - here often called the cooperating teachers - include three teachers with different teaching backgrounds and mostly teaching different subjects. They are working with sixty students of the same grade ( normally constituting two classes ) There are two teams of teachers teaching the 7th grade, two teams teaching the 8th grade, and two teams teaching the ninth grade. These six teams are responsible for most of the teaching at Landøya.

The project work is planned and carried through by the teams. In the projects subject matter is taken from the different subjects which the team teachers cover.

The form of team-teaching explained here is the only form of team-teaching practised at Landøya, i.e., a team-teaching where the teams are composed of teachers teaching different subjects. Apart from this the teachers teaching the same subjects, all the English-teachers, all the teachers of math. and so on, have meetings once a month. At these meetings the teachers give each other information on new text-books, new courses offered for in-service training, new teaching material. Sometimes they exchange ideas or teaching material or plan to make some material together. For these meetings they are drawn out of their regular teams. They will furnish their teams with information from these meetings of subject-teachers.

The system described here is the one you will meet most of the days at Landøya. But sometimes the whole school engages in an "all-school" project. Here the teachers have to cooperate also outside of their teams. The students may work with students from other classes and grades. This is described on p.15. Here the project choses was "Getting to know our community". 32 courses were arranged. Most of the course were different, but a few of the most popular ones were arranged several times during the one week of the project-work. The pupils had to sign up for enough courses to fill six hours during the five day week. Some of the course lasted only for three hours, some for six hours. If a pupil took only three hour courses, he would have covered ten courses during the week. The course included field trips to nearby industry, excursions to museums and historical sights, talks with community representatives and trips with canoes and bigger boats. On another occasion the school undertook a project week in which all of the students might choose between three broad problem-areas: Africa, our Natural Resources and Sex Roles. Here it was possible for students to study the area they chose in some depth. While working on all-school projects students are grouped according to interst. You may find 7th, 8th and 9th graders in the same group. Often these groups are rather homogeneous when it comes to abilities. Advanced 7th graders may have the same interests as the average 9th graders. But usually the pupils are taught in groups of varying sizes within their own grade. In Mathematics,English and Norwegian they are usually taught in groups of 12-15. These groups are rather permanent. They are not ability groups. They are formed by the team-teachers and intentionally made heterogeneou

There are 28 teachers at Landøya, 7 men and 21 women. The men are full-time teachers. But among the women only nine are working full-time. The others are part-time teachers carrying different teaching loads. The normal teaching load is 24 hours per week. The majority of the part- time teachers carry 18 hours per week. The teachers carrying 18 hours per week have all their work in the teaching-teams and do not teach other students than the 60 belonging to their team. The teachers are payed to stay somewhat longer in school than their actual teaching time. In these payed hours the team-planning and other meetings are performed. It is correct to say that the teachers at Landøya spend some more time at school than their colleagues in more traditional schools do. Since most of their preparation and planning is done in teams, they have found it practical to stay somewhat longer in school and use less time for preparation at home. The pupils have 30 hours a week. The administration feels that it could be an advantage if the teachers could stay the same hours at school as the pupils did. But some allowances would have to be made for the part-time teachers, usually women with small children.

10% of the teaching hours which are paid by the community for teaching at Landøya is ear-marked for remedial teaching. A couple of the teachers are specialised in remedial teaching and some of the pot which is granted for this purpose is used by them. The teaching is always performed during the normal time-schedule but,sometimes one or a couple of students are taken away from their group to have special training. But mostly the pot granted for remedial teaching is used by the regular teachers in the teams. They are the ones who know the students best, they know their problems. Knowledge of the student usually is more helpful than an advanced knowledge of the subject matter. By using from this pot the teachers are able to use more time for the slower students, pay some extra attention to them without having to take them out of their normal teaching group.

The teacher in charge of the resource-center did not have much training for this work before he started on it. But he had an interst for it and had been to some courses about audio-visual teaching. After he got the job - which is a part-time job ( he also has some teaching) he has been to additional courses. The local school board each year grants money for this job. Therefore the person in charge of the resource-center has his job for one year at a time. He was especially interested in the job which not many others were. Theoretically the job could be circulated among the staff, but they find that the way they have arranged the work with the resource-center now functions very well.

## II THE WAY IN WHICH TEACHERS ACCOMPLISH THEIR TASKS

### (i) An analysis of the pedagogical approaches used by the teachers.

### 1. The organisation of the classroom and the type of communication expected in it.

At Landøya one mostly has to do with a pupil-oriented organisation of the teaching area. At least this is what the teachers are striving for and the administration is encouraging. Of course there will be moments when the focus is on the teacher, especially is this so when he is introducing a new topic, giving a brief lecture or using the blackboard. On visiting the school one also notices that the teachers slip into this more traditional role in moments when the learning situation does not call for it. This of course may easily happen since the type of teaching the staff is striving for is different from the teaching they themselves have been subjected to in secondary schools,teacher colleges,universities.

When a teacher is introducing a new subject for a larger group of students he often uses the auditorium. Here the pupils sit in rows behind each other. This room is also used when a film is shown. When a new topic is introduced to a smaller group of pupils in the open plan, the desks and chairs are usually placed so that they form a horse-shoe. The pupils may all face the teacher who finds himself at the open end of the horse-shoe, the pupils also face each other. The horse-shoe formation is in frequent use at Landøya. In both the eight and the ninth grade the most frequent formation of desks and chairs when the pupils are not doing group work is a double horse-shoe, one outside the other. The pupils then use only the inner horseshoe when they are working in groups of 15 - 20. Both horseshoes are used for a group of 45-50 pupils.

The headmistress who herself has a teaching load of six lessons a week, encourages the staff to try out different groupings of the pupils and of the school furniture. A couple of years ago she wrote a PM containing suggestions of how to regroup the school furniture in the open area in order to ease the learning situation. She had noticed that in some parts of the area the pupils were sitting in rows behind each other when they were working individually but at the same time seeking help from their fellow-students. Would it not be better to have the students sit in groups or in a circle? Would not a horse-shoe or a circular formation of desks and chairs be more practical when a group of 15-20 pupils were discussing a subject? We normally like to catch the eye of the person or persons we are talking to. In her PM the headmistress only posed questions and made suggestions to the staff. The PM was discussed in a staff meeting and it was agreed to pay consideration to this question of arranging desks and chairs so that the students could talk to each other. Now the pupils themselves arrange their furniture in such a manner that this consideration is taken care of. That is at least true for the pupils in the eight and the ninth grade. For some reason the pupils in the seventh grade still have a tendency to place their desks in rows. On visiting the school I noticed this. The pupils in the seventh grade on one occasion had a study lesson were they were working individually on assignments in Mathematics, English and Norwegian. But they made frequent use of the teachers who were in the area ( one for each subject) and of each other. It therefore seemed to be inconvenient that their desks were placed in rows behind each other. The headmistress said she hoped the pupils would discover this themselves.

In her PM she had also suggested that it could be a good idea sometimes to gather more informal discussion groups in small crowds or circles sitting directly on the carpet-covered floor. She sometimes does this herself when she is introducing a topic for a group of pupils, relating on a theme from the history of man. This untraditional use of the floor in a school-building creates an informal atmosphere, an atmosphere the good story-teller will appreciate. The rest of the staff has not used this idea much, but that may come gradually. They at least have an example of this more informal way of using the learning space right before their eyes.

Sometimes the whole school engages in a project work which may last for a week. In this time one will find mostly group work all over the open plan and the desks and chairs will be arranged in small groups. In the middle of the open area one finds a resource center with books,newspaper cuttings, pamphlets,films, slides,film-strips, tapes and small tape-recorders. One of the teachers has a reduced teaching-load and uses most of his time in the resource-center. Here he helps the pupils find information about the topic they are studying. He cooperates with the municipal library and gets supplementary literature or some extra copies of certain books from the library. When working on a group project the pupils move freely about in the area, talking to other groups or visiting the resource center.

So far I have only described the use of the open area. This area has the shape of an E, each grade having his home-base in one third of the E. Apart from this area Landøya also has some more closed areas for special activities. From the open area a door is leading into a big kitchen with several stoves, sinks,tables. Here home economics is taught and the pupils engage in practical cooking exercises. The kitchen has equipment for 12 - 15 pupils. The pupils work in groups preparing food for each other and eat together.

The school also has a large swimming-pool which is used outside of school hours by the local community surrounding the school. In the swimming-hall there is also a smaller pool built for people with physical handicaps. It is especially built to enable people having to use wheel-chairs to make use of the pool. Physical education is taught in the swimming-pool as well as in the outdoor areas surrounding the school and in the athletics hall. This hall is about 200 $m^2$ which is considerably less than the normal size. It still seems to satisfy the needs of the staff and the pupils.

A door from the open area also leads to an area set aside for different types of crafts. Here the pupils may wander from textile work, weaving, sowing, to ceramics, metal-work and wooden-work. While engaging in more silent activities like drawing, the pupils sit around a long table facing each other.

There is also a closed area with an auditorium and another closed area where music is being taught. The latter also functions as a cantine for the students. Here they can eat their sandwiches and buy their milk. This area is without a carpet which makes it seem colder than the rest of the school. When the school is used for school parties the pupils have to use the cantine when eating but they prefer to be in the open plan while dancing.

The school also contains a couple of rooms for the school-dentist and for the health service. The health service partly also functions as a health service for the local community surrounding the school.

The school is situated at the top of a grassy hill. Some of the pupils have been working to make the surroundings look nicer. They have got hold of cheap plants, cultivated them indoors and later planted them outdoors near the school-building.

## 2. The way in which students gain access to the "knowledge" necessary for learning.

It is easy when writing about learning to concentrate on the more formal learning, on the intentional learning. Knowledge comes to mean the information you can find in books, can pick up during a lecture or a field-trip. It is important here to remember that the socalled concomitant or unintentional learnings are more lasting effects of schooling than the intentional learnings. The teacher may intend to teach English grammar. The student may or may not learn some of that grammar. But what he also learns is e.g. that English is difficult, that he is dumb, that the other students are better than him, that it is important to be one of the best students; that if he looks in a certain direction, the teacher will not ask him. He may also learn that the teacher is nice, that English is fun, that he likes to give and receive help from fellow students .

It is easy to overlook the unintentional learnings. They are hard to grasp, hard to plan for. It is still right to say that most of the staff at Landøya realizes the important role these learnings have. They know that some of these learning outcomes are intentional on their part and from the philosophy guiding the Law of the Compulsory School and the authorised Curriculum Handbook, though they may look unintentional to the students. This is for instance the case when boys and girls in the lower secondary school in Norway have exactly the same curriculum, and share their learning experiences. When they are taught home economics together and do the cooking,baking,washing up together they learn the skills involved. But they also learn that boys are just as able to engage in these household activities as girls are, that it is fun sharing them and that the school does not divide work into men's work or women's work. The boys learn to sew and knit together with the girls just as the girls learn to do woodwork together with the boys.

When working in groups the students learn that they can help each other. When the groups are heterogeneous, as they usually are when they are formed by the teachers, the students will get to know and understand fellow-students whom they normally don't communicate much with.

When we look at the more traditional learning outcomes in the intellectual sphere it is a goal that these outcomes be reached through the active participation of the students. But the word active is not easy to define. Are the pupils playing a passive role when they are eagerly listening to a good teacher introducing a new topic? Are they active when they are working by themselves filling in preformulated questions, checking correct answers? Maybe it would be more right to divide activities into those which foster creativity, independent and critical thinking and those just calling for memorization. At Landøya the pupils have their time in the more theoretically oriented part of the curriculum divided between project work and more traditional subject-oriented learning. While we find project work mostly used in the social studies and natural sciences, we find more traditional approaches being used in the written subjects English,Mathematics and Norwegian.

The project work is being done in groups often formed around a topic chosen by the students themselves. Often a larger problem area may be introduced by one of the three cooperating teachers to the whole group of 45-50 students. The teacher may give a lecture and the students take notes or he may show a film. Sometimes a student or one of the parents may introduce the subject to be studied. This introduction seldom lasts more than thirty minutes. The problem areas are chosen from the curriculum within the social sciences,natural sciences and religion. Since the project work naturally gives training in the use of the Norwegian language, the staff has decided also to take "lessons" from this subject to use for project work.

In project work the school text-books are only limited sources of information. The pupils gather newspaper cuttings, seek information at home and use the resource center in the open area of the school. It is symptomatic that after less than four years of use several reference books are completely worn out.

In the written subjects English,Mathematics and Norwegian the pupils are usually taught in groups of 12 - 15. The staff has tried out having brief lessons of thirty minutes in each of these subjects. The lessons have been placed after each other in a period of ninty minutes in the beginning of the day. The students have expressed that they feel exhausted after these ninety minutes. The teachers in Norwegian and in Mathematics also complain that the thirty minutes span force them into a more traditional teaching than they want to. Most of them use this time to introduce a new mathematical or grammatical concept, explain new words and idioms in English or elaborate on the rules for punctuation. When confronted with my question whether the same type of teaching could not just as well be practised in a much larger group - especially since this group of 12-15 students also is a heteregeneous group, some of the teachers answered that their teaching in these groups had the character of a dialogue. It was not a one-way communication like the one they used when they held an introductory lecture to 45 pupils or more at the beginning of some project work. Still the teachers of Mathematics and Norwegian feel that the thirty minutes spans are not well suited for the dialectic teaching they see as an ideal. On the other hand the English teachers feel that these small time spans are well suited for some type of pronounciation and other oral exercises.

The students are given assignments in the subjects Mathematics,English,Norwegian. But these assignments are weekly assignments covering larger bits of the curriculum, they are not day to day assignments. The students have between two and three hours a week were they can work on these assignments at school. In these hours - the so-called study-hours - the whole group of 45-50 pupils are present together with their three team-teachers. The pupils work individually and may work on any of the weekly assignments. The teachers - any one of them a specialist in one of the written subjects - are available and offer their assistance to those who ask for it. The students usually choose to work on an assignment or part of an assignment at school where they know that they may require some help, keeping the easier part of the assignment as home-work.

3. The way in which the knowledge is organised.

As already mentioned the study of the three written subjects ; in which there may be an official examination differs from the study of the rest of the curriculum. Especially in the subjects English and Mathematics the knowledge to be acquired is rather clearly defined. A clear progession is built up from the easier concepts to the more complex ones.

In the rest of the more theoreticcaly oriented curriculum two approaches are in use. Mostly the students work with projects where the subject-matter is taken from various disciplines. But it also happens that several lessons are set aside for the concentrated study of one discipline, e.g. History. Quite often the general study area is defined, e.g. the period between the two World Wars, but the pupils may choose any topic they like within this wide area. Some will work with the architecture of this period, some with fashions, some with the literature, while some will study the economic conditions people lived under at that time. Sometimes the study of such a wide area will start with an introduction where all the students participate. But this is not always the case. The topic: "Norway in the thirties" has recently been studied in the school without any common introduction to the theme. But in such a case the group works will end up in a common period of sharing of results, ideas and experiences. Sometimes the project work may result in a large exhibition . The whole school will be transformed into an exhibiting area. Here all of the pupils may wander around and study murals and posters which give some insight into the work which some of their fellow students have been deeply engaged in over the past weeks.

Landøya lower secondary school sometimes also engages in a type of project work where the general study area is extremely wide and interdiciplinary, the students may choose a theme from any subject.Pupil participation in the planning and carrying through of such projects is here highly asked for. The school has experimented with periods of "all-school" projects. To start with these periods lasted for three days twice a year. These periods have been such a success that they lately have been extended to cover a week twice a year. In these periods working groups are formed consisting of pupils in both grade seven,eight and nine. The pupils choose groups out of interest for the activities the groups are going to engage in. Sometimes the more mature students in the seventh grade may have the same intersts as the slower students in the ninth grade. These students may work well together for some time. When the whole school is engaged in group work disregarding the grades the students normally belong to,they experience the value of belonging to a school community. One of the last weeks of the school-year 1975/76 may here serve as an example.

For this week 32 courses were arranged, all of them lasting either three or six school hours. All of the students in the whole school signed up for these courses, they might choose freely among the courses, the only requirement being that they carried a load of six school hours a day. The students made up their own individual time-table and delivered it to their home-room teacher ( one of the three team-teachers ) The courses covered a wide range of topics and activities, but somehow they were all connected to the life going on in the surrounding community. The nature of the courses had been discussed among the teachers, among the students and with the parents and local community representatives. The students wanted to learn more about the community they lived in. Was there any industry? What kind? What about the history of the municipality they were living in? How had life been in Asker some hundred years ago? What sort of trees and birds were there in the surrounding community? The courses also included field trips, hikes and trips with canoes and with bigger boats. They included talks with leading community politicians. What future did they see for the community they all lived in? In one course the pupils made a study of Asker museum. In another one they visited a nearby large mental hospital. During this week the parents could experience how they, in a very natural manner, could be resources the school could draw on. Many of the parents knew the surrounding community much better than the teachers did and could give information about topics worth studying.

On another occasion several groups of pupils used parts of several school days to do social work in the community. They invited a group of mentally retarded children to their school and arranged activities where they could all participate. One of the groups also arranged a big party for older people living in a nearby home for the aged. The party was held at the school. The students had decorated the cantine, baked cakes in the school-kitchen, mimeographed songs for community singing. Out of these experiences a "social group" has grown. This group consists of pupils from all ot the three grades represented in this school. The group considers activities to engage in for the benefit of less advantaged groups. The work done in the "social group" is now regarded as extra-curricular work though it probably carries just as much value as any part of the more regular curriculum.

### (ii) An analysis of the changes in the teacher's role depending on the various teaching/learning processes he has to use.

When discussing with the staff of Landgya lower secondary school their teacher role my main impression was that the staff felt that their role had changed quite a bit since the time when they themselves were pupils. At that time their teachers were the ones who had "the knowledge" which they saw it as their task to transmit to the pupils. The teachers assigned home-work and posed questions which the students were to give the correct answers to. Their main audio-visual aids were the school text-books and the blackboard. They wanted the pupils to keep quiet and listen to the teacher who would talk in front of a large group of students sitting in rows . The teachers they had been used to, were mostly transmitters of knowledge. The role they adhered to was that of an instructor. The teachers of a generation ago felt that school was the place for some practical but mostly intellectual learning. They did not analyze "the hidden curriculum" or bother with the social learnings.

The teachers in this case-study felt that they played many more roles than the traditional teacher did. They still sometimes played the role of the instructor, but this was not their main role. Rather than being a transmitter of knowledge they tried to organize activities in which learning was likely to take place. They saw their main role as that of an advisor, a consultant. They did not want the pupils to get the impression that their teachers possessed the knowledge which they had to learn. They wanted to help the students to learn how to gain access to knowledge through the use of various different sources, from books, newspapers, journals, films to talks with community representatives, fellow students, teachers and other adults. The staff felt that the social learnings were as important as the intellectual ones. They also tried to analyze the more unintentional learnings which might take place in a learning situation arranged at school. What sort of attitudes were their students likely to acquire?

On concluding this section we may have a brief look at the acts one sees the teacher engage in during the teaching/learning process. We may further restrict these observations to the activities going on within the classroom area and together with the pupils.

One finds that the teacher plays a more active role doing a lot of talking, explaining,questioning , setting of exercises when the pupils are working with Mathematics,Norwegian and English than he does when they are working with other subjects. Also when working with Mathemaics,Norwegian and English the teachers are trying to establish a dialogue with the pupils. Some of the teachers openly admit that they adhere to a Socratic form of teaching, still most of the activity is on the part of the teacher. He makes curricular decisions, he decides on how rapid a progression the group is going to undertake, which exercises they are going to do. Also in the study hours the pupils are working with exercises set by the teachers ( they have often found these in cooperation with other teachers, found them in text-books or taken them from examination sets composed by the Council for Compulsory Education ), but in these periods one will see the teacher playing a different role. The dialogue is not between him and a large group of students. The pupils are working by themselves,while the teachers are wandering about waiting to be consulted. They offer their help to those who are in need of it. Sometimes they may work quietly just with a single student, sometimes with a small group. The teachers at Landøya have found it an advantage that the three teachers in the teaching-team who know the pupils well, also are the ones who do the remedial teaching, offer the extra help which some of the pupils are in need of. What the pupils need is often just as much a sympathetic atmosphere, some attention and some words of encouragement, as more factual knowledge.

While working with the more practical subjects and also with the project works one sees used in the social studies and the study of the natural sciences the teachers encourage pupil initiative. They want the students to suggest topics for study. They complain that the students do not do this to such a degree as the teachers would like. The Authorised Curriculum Handbook advocates the principle of pupil participation in curricular decisions. Few teachers try to make this principle work. At Landøya the teachers try this in the subjects where no official written examination can be expected, but with limited success so far. Still - they are working at this task, and their all-school projects are steps in the right direction.

During project work one may see the teacher taking on the role of the instructor for a short period but he is mostly engaged in organizing the group work and helping students find resource material.

On one occasion I discussed the formation of groups with the teachers. Did they form the groups in group work, or did they leave this task to the students? They told me that this varied. Quite often the groups were formed around some common interest. When working with the more intellectual subjects, the students had on some occasions formed the groups themselves. The result had however been that the groups had become very homogeneous. The pupils - like grown-ups - had a tendency to choose their friends among those who were of the same ability range as themselves. Some of the groups therefore had come to consist of very bright students and other groups of students who were rather slow learners and could not easily benefit from each other. The groups having very close friends in them, also had a tendency to engage in horse-play and not as easily engage in the work they were to do. After having noticed this fact, the teachers asked the permission of the students to do the grouping themselves. The students had to admit that the new teacher-formed groups were better working groups.

## III TEACHERS OTHER TASKS AND THEIR RELATION TO COMPONENTS OF THE TEACHING/LEARNING PROCESS.

### (i) The interrelations between the various components of the teaching/learning process.

### 1. General aims and objectives.

The general aim of the Norwegian Compulsory School is stated in the first paragraph of the Compulsory School Law dated June 13th 1969. This paragraph runs as follows:

It is the task of the Compulsory School - in close cooperation with the homes - to help the pupils to acquire a Christian and moral education, to develop their intellectual and physical abilities and give them good general knowledge, so that they may become useful and independent citiziens.

The Compulsory School shall foster freedom of thought and tolerance and see it as its task to develop cooperation between teachers and pupils and between the school and the home.

Such a general aim, interesting as it may be, does not however give the teachers much to act on. What is a Christian education? Which intellectual abilities are to be developed and how far? How is this going to be done? What is "good general knowledge?" How can the cooperation between pupils and teachers and between teachers and parents be developed?

The Compulsory School Law states that the aim of the school will be more specifically stated in the Curriculum Handbook. The Curriculum Handbook connected to the Compulsory School Law has appeared in several versions, the last one - the 1974-edition - being authorised by Parliament.

### 2. Specific pedagogical objectives.

The authorised Curriculum Handbook is divided into a general part and a more specific part. The general part elaborates on the more general aims of the school, stating them in more behavioral terms. The specific part deals with the different subjects. The aims of the different subjects are discussed and subject-matter to be studied is suggested. The Curriculum Handbook does not - any longer - operate with minimum requirements which have to be met in the different subjects.

The general part of the Curriculum Handbook, as well as the aims of the specific subjects, ought to be discussed in an all-staff meeting at each school at least once in a while. As already mentioned, the staff at Landøya started their work together by discussing these ideals (p.5) They discussed how the ideals could be put into practice. This initial discussion has been most helpful in making teachers see the meaning of their actions. Too often teachers pay lip service to lofty ideals about the school. They know what they are, they are able to recite them, but they do not connect them to their own teaching practice. Too seldom teachers stop to analyze their own teaching-practice and the aims they in reality are pursuing. What sort of correspndence is there between the ideals they pay lip service to and their actual classroom practice? Are the ideals only kept in mind when the headmaster or the teachers are giving a speech at a meeting, not when the time-table is laid, group-work is planned, schoolwork is graded or teaching material is selected?

Of course the objectives to be attained ought to determine the choice and use of the various human and material resources and the way in which teachers fullfill their tasks. But this is very seldom the case. It is not the stated objectives which decide the way teachers go about fullfilling their tasks, but the teaching the teachers themselves have been used to, the text-books they use, the expectations they feel that they are met with by the parents, the surrounding community, the school administration and the other teachers. They may feel that the objective is to get as many good grades as possible.

What makes Landøya school worth selecting for a case-study of this kind is the staff's awareness of the gap which usually exists between the objectives officially stated and the practice pursued in school. They analyze their teaching practice and the way their school is run. How can their practice be brought in accordance with the ideals they adhere to?

### 3. Tasks of teachers.

The teachers at Landøya, including the head-mistress, find it impossible to quantify the relative time spent on the various tasks in the teachers' routine. They said that a task like curricula planning for instance could be a task which would never leave them for days. The time they spent actually sitting down and working on this task was only a minor part of the time they used working on it. They might do some of the planning while commuting back and forth to school or they might get some good ideas taking a shower or a sauna.

Though the teachers refused to quantify the relative time spent on the various tasks, they all admitted that they used their time differently now from what they did earlier in their teaching career. They spent relatively less time for teaching in the strict sense, more for planning, more for meetings with other teachers, with groups of students and with parents. They spent definitely more time at school than they had done before. This was necessary because so much of the planning and preparation was done in teams. The headmistress voiced as her opinion that it would be a great advantage if the teachers could hold regular office hours or at least be present at school from 8.30 a.m. to 3.p.m. This would make it a lot easier to have quick meetings when necessary. But this question is a question of great debate in Norway at the moment. Though Parliament also has uttered the wish that some schools start experimenting with more regular office hours for the staff, the Norwegian Teachers' Association is not very willing to have its members participate in such experiments. The Teachers' Association is not willing to give away a right the teachers feel that they have acquired over time: the right to have flexible working hours. For women - and about 50 percent of the teachers in the compulsory school are women - this right has often been one of their main reasons for selecting the teaching profession as their career. They could combine their teaching career with their job as a housewife and mother. Most men - and often even women - at least a generation ago have felt that taking care of the house and the children was women's work even if the women had a career of their own.

Having mentioned that almost 50% of the teachers in the compulsory school are women I feel it right to mention that more than 90% of the headmasters in the compulsoty school are men. And if we look at the school inspectors for the compulsory schools, we find that among the 490 school inspectors there are only three women!

Administrative and managerial tasks: Landøya school has only one clerical worker to do all the typing and mimeographing both for administrative and teaching purposes. The teachers and the pupils therefore do quite a bit of clerical work themselves. One of their highest wishes at the moment is an off-set printing machine.

As already mentioned one of the rather unique features of Landøya lower secondary school is the high degree of staff participation in the running of the school. The assistant headmaster - the socalled "first teacher" -suggests where on the time table to put lessons which have to be taught in spesial teaching areas - like home economics, arts and crafts, music and sports. The rest of the time table is left for the teaching team to decide on. How will they use the teaching hours they have at their disposal? Where do they need to have small groups, where can they do with larger ones? The teaching teams have to discuss their proposals in a staff meeting. There it may be decided that one teaching team may have some extra teaching hours from another team because the first team has to teach considerably more students or more slow learners than the other teams. It is not difficult to see that the working atmosphere must be much better in a school where such difficult and touchy decisions are taken by those affected by it than in a school where such decisions are taken by a distant administration. The head-mistress also pointed out that the team-teachers know the students better than the administration does and therefore are more able to make right dispositions when it comes to the allocation of time.

The right to suggest new teachers to fill a vacancy or a new teaching job has usually been left to the administration. At Landøya the headmistress now is ~~going~~ to delegate this right to the team of teachers for the next school-year. She feels that the team in which the newcomer is going to become a member ought to have a right to suggest whom of the applicants would fit their team the best.

This staff participation in the running of the school of course needs time on the part of the teachers, but this time is spent in a manner which will make their jobs more interesting and meaningful. They are working gradually away from the atomistic approach to teaching.

Curricula planning: The planning of the curriculum, which at Landøya mostly is the same as planning the work of pupils, does - according to the teachers - not take much more time at Landøya than at a more traditional school. But the manner the planning is done differs quite a bit. The planning is not as much done in isolation. It is done in the teams. While the teachers use a lot of time for group planning, they use little time for isolated planning. The teachers are planning together and they also strive hard to involve students in the planning procedure.

The length of time they are planning for also differs from the length of time teachers with a more traditional approach plan for. Considerable time is spent in the term planning which takes place twice a year. Each team also has an hour a week set aside on their weekly time schedule for planning. This has proved to be too little time, so the staff has decided to set aside two hours weekly for team planning purposes. The teachers also do planning and have meetings with teachers teaching the same subjects as them, but working in different teams.

Using so much time for long-term planning also means that the piecemeal and day-to-day planning done by most traditional teachers takes little of the time of the Landøya teachers. So the extra work in one area is compensated for by less work in another area.

Use of pedagogical material: The teachers at Landøya have quite a bit of work creating their own teaching material. They need a lot of varied and up-to-date material for the project work in the social studies and the natural sciences. Some of this material they can find in text-books, but most of it they have to produce themselves - making use of reference-books, magazines, newspaper cuttings, films, slides, tape-recordings etc. Having done away with the traditional text-book oriented way of teaching, the teachers have given themselves a lot to do preparing teaching material. They have not only given themselves the task of preparing material for project work, but also for the work in the written subjects: Norwegian, Mathematics and English. The teachers teaching these subjects have had meetings discussing the production of material. They feel that the text-books do not contain enough exercises for slower learners. The teachers miss good exercises worked out to take care of the wide range of abilities a group of students represents.

What has impressed me about the use of pedagogical material at Landøya is the way in which teachers cooperate both in the creating and the use of this material. In the teachers' working-room there are several files where several types of pedagogical material are filed under different project headings. The teachers file the materials they have used for a certain project with reference cards, listed literature, even stencils. They mention which films they have used, where they got hold of them and how useful they were. When a new team of teachers is starting a project work, they always look in the file first to see whether such a project or one similar to it has been carried out before. If it has, there is a host of ideas to get from the files.

Supervision and evaluation: The teachers at Landøya spend a considerable amount of time evaluating their own work and the work of their pupils.

The more formal evaluation of pupils' work, the setting of grades and correcting of papers and tests usually takes up quite a bit of time for all teachers in lower secondary schools in Norway. The teachers at Landøya on the whole maybe use somewhat less time for this formal evaluation than teachers in more traditional schools do.

Some years ago the teachers at Landøya had an experiment going in the social studies and the natural sciences. The pupils did not get any formal grades in these subjects in the seventh and eight grade. The teachers could use less time for formal evaluation, more time for helping the students in their work. The teachers had only good experiences with this experiment. They felt that the atmosphere was more relaxed when the pupils did not have to compete with each other. The teaching climate was better when the threat of obtain a low mark on part of a project work was done away with. The students worked much better in groups when they knew that they would not be subjected to an individualistic formal evaluation afterwards. In short: the teachers were very satisfied with the experiment. So also were the students. To these students it was not necessary to have the artificial type of motivation which grades represent to make them work.

But just at the time when the staff wanted to turn their successful experiment into regular practice we had a large public debate in Norway on the grading system in the secondary school. A government- appointed committee had just submitted a proposal on this grading system suggesting that grades be done away with completely in the compulsory school. This suggestion gave rise to a sudden parent involvement in school politics. Parent-teacher meetings about the grading system were held all over the country. The meetings gathered large audiences and they usually ended up by making a petition to the Ministry of Education insisting that the grading system in the compulsory school be kept in the way it was. This petition would be signed by most persons present at such a meeting. A meeting of this kind was also held at Landøya in the heat of the public debate. Though the teachers and the headmaster tried to argue for the losening up of the grading system, the great majority of the parents now wanted the formal grading system back in the subjects and the grades were Landøya had successfully done away with the grading system. The teachers felt that they had to yield to parent pressure and reintroduced formal grading where they had done away with it.

So the teachers at Landøya have to do more correcting of tests and grade setting than they like.

There are other types of evaluation in which the teachers at Landøya believe more and use more time than their colleagues in more traditional schools do.

The teachers at Landøya use quite a bit of time to evaluate their own teaching and to have the students evaluate the teaching and their own work. At the end of a project work all involved will try to evaluate the work they have been doing. What have they learned? What did not work as they expected? What type of advice would they give someone starting the same type of project? The teachers evaluate their work in staff meetings, try to learn from the experiences they have made. When they are not satisfied with the way their work is progessing they are free to write a P.M. about their worries and have them discussed in a staff meeting. There exists a whole collection of such P.M.s. In some the teachers voice their dissatisfaction with their own inability to care for the wide spread of talent among their students. What can be done to avoid that the slower students get tasks which are too difficult for them and make them feel inferior? What can be done so that the fast learners can get some work that will challenge them too? The idea of having the fast learners help the slower ones was brought up in a staff meeting. It was discussed and tried out. It seemed to work out with some teachers but not with others. The next step will be to discuss why this is so. In other P.M.s the administration discusses the remedial teaching they are currently doing. Could the slow students benefit more from a different allocation of time and resources than the present one? Would it be better to use more of the resources set aside for remedial teaching to have the team teachers who know the students spend more time with them when they are among the other students in the teaching area instead of having them leave their group and meet with a special teacher in a seperate room? There are other P.M.s focusing on the idea mentioned in the Curriculum Handbook of close cooperation between the school and its neighborhood. How is this idea put into practice at Landøya? Could more be done? And how?

Stopping to evaluate their own work the teachers have asked themselves whether their way of organizing their school takes more time than teachers normally spend for school work. They have asked themselves what they have gained. The teachers seem to agree that in the beginning they had to use more time for school-work than teachers normally do. Now they just use their time differently. They use less time for daily and solitary preparation, more time for weekly and long-term planning together with other teachers and pupils. The teachers feel that their most important gain is to be found in the improved relationships between the different partners involved in the small society which Landøya school represents. Especially is this so with the relationship between teachers and students.

In the spring of 1975 the ninth graders were the first group of pupils who had spent all their three years of lower secondary schooling at Landøya. The staff seized the opportunity to get a more systematic and a written evaluation from this group of students of the organizatorial pattern the school had been experimenting with. What did they think of the flexible grouping system which had been used? What did they think about the team-teaching? In which learning situations did they prefer a big group, in which a small one? 32% of the students felt that the showing of a film was an activity well suited for a big group, 24% mentioned the writing of papers and tests as an activity well suited for this type of group and 17% named lectures in this connection. 32% of the students felt that the small group was best suited for discussion purposes, 24% felt that this group was best suited when the teacher introduced a new topic and 22% mentioned that they thought this grouping was best when they worked individually.

Contact with other adults and with pupils: As already mentioned the teachers are very satisfied with the relationships between themselves and also between themselves and the pupils. They feel that they have come down from their pidestalls and are not regarded with fear and hostility by their pupils.They are people working together, helping each other, sharing experiences together, planning activities and evaluating their work in a friendly atmosphere. On visiting the school one is struck with the friendly and often joking tone between the teachers,including the headmistress,and the pupils. The team teachers get to know the pupils very well spending so much time with them every day. The teachers also have very friendly relationships among themselves, some of them even have grown to become personal friends outside of school through their school-work. The whole staff sometimes go to the theatre together and have a snack together afterwards.

The teachers are striving to better their relations with the parents. The parents who have children at Landøya are strongly school-motivated on behalf of their children. Most of them have a rather high academic training themselves and know the importance of a good schooling in the competition for the better paid and more interesting jobs. It is easy for the teachers to feel that the parents are keeping their eye on the school, working as a conservative force making sure that the teachers do not experiment too much with their children. We saw that the parents were acting in this way in the controversy about the giving of grades. But we have also seen that the parents of the pupils at Landøya may serve as important human resources that the school can draw on during e.g. a project work.

Too often the relationship between teachers and parents is one in which the teachers feel that they have to defend themselves all the time and that the parents are attacking them. Before a parent-teacher meeting they ask themselves: Have I done something lately which some of the parents will dislike and will find reason to critize me for? In more traditional schools the teacher will feel that he or she will be quite alone trying to defend himself from the attacks of the parents. Why did he teach mathematics this way and not that way? Why did he use so much group work? At Landøya the whole team of teachers is responsible for the teaching of a certain group of students. The team will meet the parents together and will explain how their discussions have lead to certain results. When questioned, any one in the team may answer. The responsibility for the teaching and also for the criticism is shared. The points brought up by the parents have usually been discussed by the team during the planning process.

The teachers at Landøya are gradually establishing a friendly relationship to the parents of their pupils. As already mentioned, they have made great progress in their efforts to open their school to the surrounding community. The questions the staff and the students ask themselves are: What does our neighborhood look like? What is there to be learnt about it? How can we be of any use to groups in the surrounding community?

## IV CONCLUSION.

When teachers are going to fullfill the new roles and tasks which the teachers at Landøya are trying to fullfill, certain aptitudes will be required. When discussing the nature of these aptitudes with the writer, the teachers also made suggestions as to what initial and continious teacher training could help them to acquire and develope these attitudes.

In our discussion we divided the aptitudes required into four categories:

( i ) As regards the pupils: In his new role the teacher has to accept that his traditional authority is built down. Everything he says must be open to questioning by the pupils. Nothing is the way it is because the teacher says so. If he is going to win a point, he must do so by the strength of his arguments and not by pursuasion or by the use of a false authority.

His new role requires a deep respect for the integrity of his pupils, for their right to voice their own opinions and to differ. The teacher must be willing to enter into a dialogue with the students. This of course calls for a teacher with a basic security, an open mind and a democratic outlook.

Suggestions for teacher training: The implications of the idea of school democracy as it is laid down in the Curriculum Handbook should be discussed. The Curriculum Handbook says that the pupils should be encouraged to participate in curricular decisions. How can this be done?

It will be important in teacher training that the student teachers get into friendly contacts with their future pupils ( or at least children of about the same age ) If it is not possible to get a period of practice teaching at a cooperative school like Landøya, it might be a good idea to get some practice among youngsters in an out-of - school activity like in a summer camp or a youth club. According to the new Law of Teacher Training such out-of-school practice among children and youth will be accepted as part of the practice teaching necessary in a teacher-training.

To develope the basic security needed in his new role the teacher ought to be trained in the analysis of his own reactions . Group dynamics and the discussion of commonly used ego defense mechanisms might here be a help. To be able to display his own ignorance or doubt or to admit that he might be wrong the teacher has to have a security which comes from a thorough study of his own subject. The more you know the easier it is to admit that there is a lot you do not know.

(ii) As regards other teachers: In his new role the teacher will not be working in isolation. He will be sharing responsibility,ideas,triumphs and defeats with other teachers. Both the insecure teacher, the lazy teacher, the very ambitious or extremely active teacher may run up against difficulties in a teaching team.

Suggestions for teacher training: In the periods of practice teaching in the Teacher Training Colleges it is important that the student teachers get some practice in team-planning and team-teaching. The prospective teachers ought to get some training in working in groups of varying kinds and with different purposes. Group work ought to be a frequently used teaching method in any subject in the Teachers' College. The first semester in the Teacher Training Colleges ought to start with a basic course in group dynamics. Through constructed situations, role playing and gaming the prospective teachers will get to know and to analyze their own reactions. What are the advantages and the difficulties of working in a group? Which of their own shortcomings do they have to work at to become good group members?

It is important that the prospective teachers in their periods of practice teaching are encouraged to do the planning and the teaching in groups. Too often the Teacher Colleges adhere to a practice teaching in which the future teachers are taken care of by a "master teacher" who is going to teach them the tricks of the trade. The prospective teachers are expected to do their planning more or less alone and only for a short period at a time ( one lesson or one day ) and to teach alone. This is the old model still in use many places. Landøya serves as a school where practice teaching is being done. Groups of student teachers from Oslo Teacher Training College each year have some of their practice teaching at Landøya. At Landøya the whole staff feel responsible for these student teachers. There is no contract between one "master teacher" and the Training College. The staff will discuss which team would like to and have opportunity to care for and make use of a group of student teachers. The student teachers will participate as members of a teaching team and so they participate both in the planning and the team-teaching. To me this seems to be an ideal way to get to know the teaching profession. When participatin in a group consisting of some experienced teachers and some student teachers the student teacher will be more likely to argue,bring forth his points than when he is only confronted with a "master teacher". In a teaching-team at Landøya there usually are teachers with different teaching training background. They often hold different political opinions . They have grown to respect each other and to know that there are few correct answers to the problems they have to deal with.

(iii) As regards other adults: The opening of the school to the community means that the teacher will get into close contact not only with the pupils' parents but also with other members of the community. The teacher's willingness to learn from the surrounding community will here be important. An open mind, a respect for local variations and dialects and an eagerness to get to know local history will help the teacher coming to an unknown school district.

Suggestions for teacher training: To be able to understand the attitudes parents may have towards school, it is important that prospective teachers while student teaching attend some parent-teacher meetings.

In one Norwegian Teacher Training College the student teachers have had interviews with all of the parents of a large group of pupils they were student teaching. They went to the homes of the parents and had discussions with them about school. In this manner they also reached the parents who normally do not go to parent-teacher meetings. They met parents who had had frustrating experiences with school themselves. They met parents who did not care much about school and others who regarded school as very important and who were greatly concerned with the school career of their children. The interviews gave valuable information for further discussion in the Teacher's College about parent-teacher cooperation.

Another idea which has been successfully tried out is to train for parent-teacher meetings through role-playing. The prospective teachers play both roles and discuss the implications involved. Role-playing technique may also be used in an actual parent-teacher meeting. To help the understanding when a certain topic is discussed, the parents play the role of teachers and the teachers the role of parents. This shifting of roles often does wonders to the relationship of the two groups concerned.

In order to train the student teachers' respect for local variations and for people from a different social origin than their own, it is important that the prospective teachers in their training in the Teachers' College work with projects e.g. in the social studies where they study the nearby community, its history and the way people live.

(iv) As regards himself and his knowledge: If the pupils shall get the security which comes from knowing their teachers well, it is important that they have only a few teachers covering a wide range of subjects. The teachers should not be too specialized. It is an advantage if they have a broad training and also are willing to widen their knowledge.

An experimental mind is also important in a setting where new ideas are tried out. Why do we want to try out that idea? How are we going to evaluate whether we are succeeding or not?

Suggestions for teacher training: Teacher training should make the students capable of handling rather broad subject areas. The prospective teachers ought at least to get some basic knowledge of several subjects. Besides they must also be allowed to study their own specialities, so that they have some specialized knowledge they can contribute with in a team.

To learn studying techniques and how to acquire knowledge in a new field must be important for the teacher in his new role. These techniques should be trained in the Teachers' College.

In an innovative school the teachers will need some training in small scale research and techniques used in developmental work. Courses in educational statistics in the Teacher Colleges ought to focus on rough and ready instruments which the teachers can use themselves. They must be trained to perform an internal evaluation of their work. They should also get some training in the analysis of soft data like a case-story.

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# UNITED KINGDOM

## TEACHING AND LEARNING AT COUNTESTHORPE COLLEGE*

by

Michael Armstrong

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* Because of the difficulties of publication, this text has been reduced in length, the editing being done by Ann Corbett.

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# PREFACE

This case study of an innovative secondary school in the English state sector is presented in five parts. The first gives the background on the school and its pupils. The second describes the innovative characteristics, as they were seen at the beginning, and as they developed over the past six years. The third looks at how teachers encourage learning, by looking in detail at three examples. The fourth part looks at another aspect of the teachers' task with an examination of the way one group approached their own in-service training. A final section looks at a section of the school which stayed outside, and speculates about the impact of the innovation.

The study focusses on teaching within "teams" since this is widely seen as the school's chief contribution to pedagogical originality. The school is doing nothing less than trying to adapt to the education of adolescents the most fruitful methods of primary school learning.

It is written by an "insider", one of the teachers most involved in developing the new approach. I have tried to be fair while not concealing my own views. For while these are shared by many other teachers, they are not shared by all. I have tried to convey the flavour of what we are doing by quoting at length from some of the documents produced over the past six years, including an agreed staff statement cited in the appendix. Nevertheless the case study as a whole is essentially a personal reflection on the development of teaching and learning opportunities in the secondary school in which I work.

## THE SCHOOL AND ITS PUPILS

Countesthorpe College is a publicly financed secondary school and community college created in 1970. It takes students between the ages of 14 and 19 and also offers day-time and evening courses to adults.

It is in the East Midlands county of Leicestershire, on the edge of the Leicester city conurbation (pop. 300,000). It is designed for all students in a catchment area which consists of two suburban neighbourhoods and a large city council estate. All are within five to seven miles of the city centre.

It is an "upper" school, drawing its students from two "high" schools, in accordance with the Leicestershire pattern of comprehensive secondary education. Under this, students go to non-selective "high" schools between the ages of 11 and 14, after which they transfer to non-selective "upper" schools to complete their last two years of compulsory secondary education. If they wish they may stay for up to a further three years in full-time schooling. Many of those students are working for the public examinations of the General Certificate of Education or the Certificate of Secondary Education. (1)

## THE INNOVATION

### At the beginning

When the school was created in 1970, it was a uniquely thorough demonstration of a public authority's commitment to progressive educational thinking. The school opened in new buildings especially designed to support new teaching methods. (2) A forward looking principal was appointed: an acknowledged champion of methods of study which would encourage independence among students, and a believer in a style of government for the school in which the staff would be equal participants.

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(1) Further background about the school can be found in:

- OECD's Case Studies of Educational Innovation, Vol. III, at the school level, by Gerald Bernbaum, OECD 1973. This is a critical view written within the first few months of the school's existence.
- The Countesthorpe Experience, ed. John Watts, Geo. Allen and Unwin, 1977, which is written by the staff and sympathisers.

(2) But although the buildings were purpose-designed, the school's principal was only consulted about the building in its final stages. The local authority had designed the building under the impression that what was needed were areas designed for specialised use. In fact the concept of teaching which has evolved as a result of staff discussion and experiment has been markedly generalist.

Two terms before the school opened the principal had been able to appoint half his staff, and launch into the first of the discussions which went on almost continuously for two years. From the beginning three principles were established (1). These concerned curriculum teaching methods, and staff-student relationships. Although there were many disagreements on details most teachers accepted the general drift.

As far as the curriculum was concerned it was agreed that there would be a basic curriculum which was common and compulsory for all, covering each of five areas of knowledge: mathematics, science, the arts and crafts, English and social studies. Every student would be expected to spend three quarters of the week engaged on this compulsory curriculum, while the last quarter was devoted to optional studies of many different kinds, academic, artistic, practical. This was in effect the opposite of the conventional strategy of the upper secondary school in which there was wide choice of curriculum and few if any compulsory subject areas.

The staff justification for reversing the conventional strategy was based firstly on the conviction that all fourteen to sixteen year-olds were capable of sustaining an interest in all the major human disciplines; and, secondly, a determination to allow within each broadly defined discipline the greatest possible variety of individual choice. We intended, therefore, to replace choice as between many different subjects, (often, in the conventional upper school, at the expense of choice within any given subject) with choice within broadly defined common curriculum areas. We were aware of the apparent contradiction between a largely compulsory curriculum and a desire to foster individual students' independence and autonomy. We felt, however, that learning methods could be sufficiently flexible to accomodate the demands of autonomy within the bounds of a common curriculum.

The second concern, teaching method, derived from two negative presuppositions. The first was opposition to streaming or setting according to "ability". Modern languages has been the one exception, although the sciences have sometimes streamed in order to determine, at a relatively early point in time, whether a student should take a course leading exclusively to the GCE examination or exclusively to the CSE examination.

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(1) What follows is the author's interpretation. The appendix quotes the document agreed by the whole staff three years after the school's establishment.

The opposition to streaming was based on a mistrust of its academic and social consequences, especially, though not exclusively, for lower stream students rather than on the positive advantages of mixed ability groups. We decided, simply, to refuse to stream unless and until we found that we could not teach effectively without streaming. This was the case with modern language teaching which depended on class instruction techniques.

The staff's view on teaching methods was also conditioned by a dislike of class teaching as the norm. In the staff's eyes, it paid too little respect to a student's individuality or autonomy, and encouraged too great a passivity in the pursuit of learning. We wanted instead to emphasize the active, exploratory, self-inquiring aspects of learning.

We therefore planned our learning groups, spaces and resources, to accommodate variety in teaching methods and group sizes, assuming working groups of from one to seven students or thereabouts. Class teaching was to be the exception rather than the rule, though larger than class-size groups were also envisaged as an occasional alternative. As for resources, we based our work on the techniques explored in the Nuffield Foundation Resources for Learning Project and similar projects which flourished in the late sixties.

On the third issue, the character and quality of staff and student relationships within the school, it was our aim to establish a non-authoritarian pattern of relationships, although there was considerable disagreement as to quite what this implied or how to achieve it. The staff decided against having codes of rules and punishments, school uniform, formal modes of address to staff. We hoped instead to establish a general code of behaviour by example, discussion and persuasion. We also aimed to encourage student participation in the running of the school.

This non-authoritarian presumption did lead, in the early months, to endless problems, compromises and disputes, yet in many ways it was in the sphere of staff-student relationships that the school had its chief successes in its first year.

Even more successful, was the school's commitment to a participatory government by the staff. By the close of the first year the principal had divested himself of the single responsibility for the internal policy of the school normally assigned to the principal in English schools. Instead, the school was governed by staff committees, with the principle assuming the role of chief executive and the school's public representative.

## The team system

Nevertheless it was clear that these ideas created conflict among the staff, some seeing contradictions between the largely compulsory school curriculum and the aim of non-authoritarian staff-student relationships. Some teachers wanted a greater recognition of the demands of individual student autonomy in all aspects of learning.

This led, during the school's second year, to a major reconstruction of the curriculum for the youngest students, those in fourth and fifth year of their secondary education (i.e. the two youngest year groups at Countesthorpe) and the introduction of the "team" system, or miniature schools within a school.

The reconstruction began in the first term of the school's second year when a working party was set up to examine the curriculum of the fourth and fifth year in the light of the first year's experience and propose changes if need be. After a term and a half of argument and debate, the working party proposed the idea of "teams", involving major changes to the school's curriculum and pastoral organisation. But these proposals split the staff. They were then withdrawn and the working party reconvened. Further formal and informal discussions took place during the second term, and when towards the close of that term, the working party's modified proposals were resubmitted, they were passed by a large majority.

The "teams" were a response to the difficulty of implementing the school's curriculum strategy. The problems seemed to be in trying to reconcile the principle of autonomy - that every student should be responsible for determining the choice and direction of his own course of study with the help and support of his teachers - and the principle of a common curriculum.

At first we had sought to reconcile the two principles by insisting that all students spend equal amounts of time studying each of the major areas of knowledge we identified (see page 5) while insisting at the same time that within each area all teachers encourage each student to pursue knowledge in his own distinctive way.

But that strategy appeared to many of us to be failing, not so much because principles were impossible to reconcile, but because the context within which learning and teaching were taking place frustrated our attempts at reconciliation. We had begun to see that the context we needed in order to make a success of student autonomy was one in which teachers and students could take part in a kind of continual conversation with each other. This was not, in our view, a dialogue or discussion or argument, but a more free-ranging intimate, expressive and egalitarian mode of discourse and of inquiry than these. Only through conversation, we had begun to feel, could a teacher learn to identify and value the intellectual demands and interests of his students and a student those of his teacher. Only such a context seemed to offer us a realistic hope of reconciling the students' and the teachers' experience and concern. (1)

Yet the context in which we were working at this time did not encourage conversation to any great extent, with clear divisions between a teacher's academic and pastoral roles, and between the teaching group and the tutor group. Our initial organisation, like that of many other comprehensive schools, had kept tutorial guidance and teaching apart as distinct activities with separate structures. Guidance was organised through a pastoral system of year groups and tutors; teaching through an academic system of subject departments and subject specialists. Some tutors never taught their tutorial group. Those who did, taught them no more than one subject and no more than two or three lessons a week.

It seemed that what we needed was a way of bringing the pastoral and the academic systems into one. We had begun to realise that most students, if they were successfully to direct their own course of study, needed sustained and systematic guidance from teachers who had come to know them well by working with them closely for a long time. In that case the tutorial role ought to be at the centre of the academic structure of the school rather than on the periphery. The tutor's task was to work with his students not just within the area of his own academic specialism but across the curriculum, teaching whatever he himself was most interested in and involving himself in whatever most absorbed his students. The more he participated in the work of his students the greater his chances of spotting and turning to advantage opportunities for extending and deepending the range of their intellectual and personal concern. And thereby he would help them to direct their own studies successfully.

We did not want to deny the excitement, or even the necessity, of specialisation in secondary education. We knew that some of us would always be happiest teaching our own special subject to students who had chosen to study it. But we also knew that many of us had to become more than specialists if we were to achieve the academic goals we had set ourselves, let alone the pastoral goals. We felt that while, in theory, every teacher needs to be both tutor and specialist, in practice this is often difficult to achieve. We should therefore aim for a structure in which the two roles could complement each other.

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(1) In an essay on *The Voice of Poetry in the Conversation of Mankind* (*Rationalism in Politics and other Essays*, Michael Oakeshott, Methuen, 1962) Oakeshott defines the central exploratory aspect of education in terms of a conversation.

It was against this background that the curriculum of the fourth and fifth year was reconstructed to provide an element of team time and to give a pattern that many people see as significant for the development of comprehensive secondary education. (1)

* * * *

Under the "team system", each year group of students entering the school at fourteen is divided into units of between 100 and 150 students. Each unit becomes the direct pastoral and academic responsibility of a group of from five to eight teachers. Students and teachers together make up the "team" and stay together for two years. The group of teachers come from differing specialist backgrounds, most of them from social studies, English or mathematics. The common factor is not their particular specialism, though a balance of specialisms is sought, but their readiness to assume a new kind of teaching role - new, that is, to secondary schools (but common to primary schools). Their task is to get to know the students in their team, which is usually divided into tutor groups of some 20 to 25 students with one tutor, to work with them over a wide range of activities, and to guide and assist their entire course of study within the college during the two-year period.

There is no longer a strictly compulsory core of studies which all students have to follow, but it is part of the tutor's role to help students achieve a balanced curriculum involving all the major disciplines. Tutors spend at least half the week with the students in their team, working in one particular area or set of rooms, which is as far as possible exclusive to the team concerned. Thus teachers and students together make up a kind of mini-school within the College, semi-independent, close-knit, distinctive in place and character.

For timetabling purposes the school week is organised in two halves of ten sessions each. One half - colloquially called "team time" - is spent by the students in their team area working with their teacher tutors. The other half is devoted to specialist activities under the direction of specialist teachers from outside the team itself.

The difference between "team time" and "outside specialist activity" is a difference of emphasis. It would be wrong to think of the latter as the time when students study "subjects" and the former as the time when they don't. It would also be wrong to suppose a sharp division between "specialist" and "generalist" teachers. The difference is rather in the kind of relationship between teacher and student and between both teacher and student together and the activities they engage in, that is to say between them and the curriculum.

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(1) Ref: The Countesthorpe Experience, op. cit.

Within the team the relationship between teacher and student is intended to be as many-sided as possible. The team's overriding objective is to help its students to make sense of autonomy and to put it to use in the expansion of intellect and personality. The teacher tries to get to know each one of his students well, both personally and intellectually, in order to help them to develop their own powers of mind and feeling. This, we think, can only be done by talking with students, working alongside them, teaching them and learning from them, over a range of activities and subject matter. The teacher has to be ready with his own ideas and responsive to those of his students, over a very broad area of knowledge. The boundaries between "academic" and "pastoral", between "work" and "play", between teacher and taught, between different "subjects" or "disciplines" become elusive and shifting within the team situation.

In contrast, when students work with specialists outside the team, they go to engage in a definable set of activities or to study a particular body of knowledge with the help of an expert. In this context teachers and taught probably concentrate more narrowly on the subject in hand.

Even within team time there are conventional specialisms. In one team, virtually all 80 students have at least two periods of mathematics. In another, some third of the students have two periods of Biology in team time.

But for the rest of team time, most of the work undertaken by students falls into the broad area of the humanities, where a tradition of teaching has begun to emerge which suits the many-sided role of the team-teacher or teacher-tutor. (Nevertheless, one of the criticisms we often make of ourselves is that our work is still too heavily dominated by the humanities.)

Here a distinction is often drawn between English and Social Studies, but the boundaries between these "subjects" are fairly loose. All the humanities specialists within the team teach both English and Social Studies and the mathematician and scientist also take part in the teaching of both "subjects". Work in English includes literature, creative writing, the formal skills of literacy and drama. Work in Social Studies includes both a thematics approach based on syllabuses leading up to the CSE and 'O' level exams, in Social Studies and Sociology respectively, and a considerable amount of individual research, project work, local studies and community activities. Both English and Social Studies involve a lot of talk, both individually between teacher and student or student and student, and in small groups.

Different teachers may specialise in particular aspects of English or Social Studies. But all of us teach our students both English and Social Studies in one way or another. There are, within the team, no English Specialists or Social Studies Specialists, in the sense in which there are Maths. and Biology Specialists.

Besides the fixed regular maths and biology periods, there are, in each sub-team, certain other fixed points. One team holds regular large group sessions, one afternoon a week, at which some stimulus for creative writing is presented to the whole sub-team. Another holds weekly sessions for students working towards the 'O' level Sociology exam, for those who want help over formal writing skills, and for those wanting to do Drama. But for the most part, students determine for themselves, in collaboration with their tutor, the weekly pattern of work.

Despite the bias of team time towards the humanities, some of the students' work fits only very loosely, if at all, within the conventional framework of humanities teaching. A largish minority of students undertake some form of work and study within the local community - on farms, in primary schools, mental hospitals, the Community College Creche, helping out old people at home and so on. The intention behind such activities is not only to give students an opportunity to help the local community but, equally, to increase their understanding of society and of the individual. Many students spend some time on idiosyncratic interests of their own or sometimes of their teachers - a study of pond life, hot-air balloons, judo, sewing, table-tennis, studies of animal behaviour, learning the piano, Italian, to mention some current examples. Many students occasionally spend team time on work which has spilled over from their outside specialist concerns. A student who wants to continue with Maths. or French or Physics in team time, is rarely discouraged. Where possible we try to use such occasions as an opportunity to get to know more about the student's work and interests.

As for methods of grouping and resources for learning: the normal pattern is for students to work individually and in twos and threes, choosing for themselves, who to work with. Small group activities are relatively common, large group sessions rare. When the school first opened there was a general assumption that the worksheet was the most promising way of presenting learning materials to students working individually. Within the team we no longer feel satisfied with this assumption. While we make considerable use of worksheets from time to time, we prefer to structure as much work as we can around a process of conversation between teacher and student out of which will arise practical and literary activities which must be resourced individually and differentially as they get underway, through the use of books, of direct experience, of visits, interviews and surveys, of practical activities, of tape and videotape and film, of worksheets and written extracts and photographs, of documents and so on. Although we try to prepare as many resources as we can in advance of a particular theme which we intend to push, we find in practice that the major work of resource preparation goes on in the course of each particular study on the part of given individual students or groups of students.

Assessment has always been something of a problem within the team. We want to avoid "marks" which seem to us notoriously inadequate to express the range, variety and quality of achievement within our students' work. But we are aware of the dangers of being over-subjective and over-impressionistic in our assessments. Nevertheless our methods of assessment remain basically subjective, although we frequently consult each other over assessment and are at the moment planning to meet as a team for a series of joint assessments in the areas of English and Social Studies.

We all keep records of students' work and activity week by week, and some of us, day by day. In these records we note what work and how much work students have been undertaking, we record our judgements of their written and oral work and of their practical work, we mention any particular problems in their work, and we periodically assess their overall progress in terms of concept attainment, skills, persistence, enthusiasm, overall intellectual understanding. We do not have any fixed form in which these records - almost as it were, diaries - have to be kept since we feel this is a matter where each teacher has to be his own judge. But we do expect the diaries to be kept up to date by all teachers in the team and to be wide-ranging and systematic. We feel that the most useful assessments of all come from discussing our students' work with each other and from watching and working with each other's students from day to day.

Each tutor is directly responsible for the administration of his own group - for maintaining the register, dealing with absence and lateness, keeping in touch with parents through regular visiting, supervising his students' timetables, counselling them, arranging careers guidance, dealing with matters of social behaviour, considering comments and complaints either by students or about students.

* * * *

We have now been working in teams for four years, long enough to recognise their value but short enough to know how far we are from making the most of the opportunities they present us. To us, that kind of opportunity was well defined by the American philosopher of science and Director of the Mountain View Centre for Environmental Education, University of Colorado, Professor David Hawkins, in the English educational magazine Forum (Vol. 14, No. 1, Autumn 1973) whenwriting about primary education. "As many kinds of subject matter are now organised, it is not obviously nor easily possible to transform the teaching of them to a more self-directed and informal style of work in schools. Under these circumstances we are rather likely to fall back into the old polarities. By one party the tradition of the formal course will continue to be seen as for the most part a dreary, ineffective and superficial "coverage" of subject matter on its way to ossification. By the other party the advocacy of resource-based learning will be seen as a denigration of both rigour and discipline in the mastery of subject matter. What I hope is that this old issue be buried and that we address, instead, the question as to HOW wider ranges of subject matter, of that stuff alluded to in curricula as syllabi, can be revived and reconstituted and extended so as to make it more diversely accessible and appealing to growing minds, more interwoven in the texture of a rich school environment." We like to think that we are beginning, in the Countesthorpe "team" system, to create the kind of secondary context in which those questions can be investigated and, perhaps, answered.

It is clear that the teacher's tasks within a team embrace many roles. The teacher in a team is by turns an "instructor", a "supervisor", a "chairman" and an "animateur". Sometimes it is possible to isolate these varied roles. The "team" teacher is an "instructor" when lecturing; a "supervisor" when directing an individual student's progress; a "chairman" with a small group; an "animateur" when assisting a student in the execution of an extended study or "project". More often all four roles converge in the particular tasks on which teachers and students are together engaged. If the role of "animateur" seems the most important that is because a role which embraces those of "guide", "stimulator", "consultant" and "collaborator", appears to embrace also on many occasions, the roles of instruction, supervision and chairmanship.

However the complex nature of the teacher's role within the "team" is less distinctive than the interrelationship between teachers, students and knowledge - the set of curriculum activities - within "team time". The fusion of the teacher's academic and pastoral concerns implies a readiness on the part of the teacher to extend the range of his own curriculum interests, to involve himself in whatever is of most concern, intellectually, to his students as well as trying to involve them in whatever is of most concern, intellectually, to himself.

The summary of team life already quoted indicates something of the range of interests and activities in which a teacher, in "team time", will be expected to engage if he is to succeed in this objective. It also implies that guidance is paramount. Without the systematic help of tutors or pedagogues only a few students are likely to direct their own learning successfully. Wherever education assumes the autonomy of the student, the tutorial role becomes the teacher's central part in the education of his students. But the tutorial role cannot be seen as that of some sort of educational consultant. In order to be equipped to offer sustained and systematic guidance to his pupils a tutor needs to study with them as well as talk to them or observe them.

There are parallels to this conception of the interrelationship between teacher, pupil and task in the practice of "progressive" primary schools. Indeed many of the teachers working in Countesthorpe's teams see themselves as attempting to carry into the context of upper secondary education something of the tradition established in the best of English primary schools.

To quote David Hawkins again, "What the best traditions of early education have done amounts to a major reorganisation of subject-matter into a common and coherent framework". He goes on to talk about how the sand and water and clay, the painting and writing and reading, the cooking and building and calculation, the observing and nurture of plants and animals are woven together into a complex social pattern which sustains romance as it extends a concern for detail and for generalisation. To him, the skilful school teacher is "able to see order and number, geography and history, moral testing grounds and aesthetic qualities in all the encounters of young children with the furniture of a rich environment". It is that tradition which teachers in the Countesthorpe "teams" have been attempting to extend and interpret in the education of the adolescent.

## HOW TEACHERS ACCOMPLISH THEIR TASKS

The following descriptions of teaching within the teams are designed to illustrate different facets of teaching within the teams. My commentaries accompany accounts drawn from the teaching experience of myself and some colleagues.

- Episode One: (by Lesley King)

How a student is introduced to life and work within a team. This teacher came to Countesthorpe when the school opened as a social studies teacher in her probationary year. Her account was written at the end of the first half-term in a new school year. (1)

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"I first met Phil at his middle school at a time when I was really much more concerned with my present fifth year group's examination work and future prospects. I was interested in my new group but had no time to give them my attention. I talked to Phil for about 15 minutes, giving him a booklet of basic information and a bus pass application form. The interview was quite a difficult one. He was obviously nervous. His voice was rather throaty and I found myself talking slightly more softly than usual. I remember that he asked no questions but in answer to my query said that he was looking forward to coming to Countesthorpe. I wasn't convinced and asked him if he minded having a woman for a tutor. Some boys resented being landed with the only woman in the team. He said no. I remember little else about the first meeting. My notes, taken at the time and added to that evening, tell me more, Phil doesn't like Maths but likes English very much. He reads adventure stories, thrillers and ghost stories. He wants to give up French but might like to begin learning German. He is also interested in what he has heard of Control Technology and Art. He plays soft-ball, table tennis and volley ball. He has an athletics star award. (He didn't tell me this; he was wearing it.) He also plays the piano accordion and would like to do some music.

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(1) This account originally formed part of an essay written by Michael Armstrong and Lesley King for the magazine Forum (see Forum, Vol.18, No.2, Schools within Schools: the Countesthorpe Experience.)

"I met him again shortly afterwards when he and the rest came from the middle school to look round our school. I remember being anxious that they should be impressed by the school. I'm always a bit afraid that fifth year students will show off in that tough way they sometimes do. Then I'll shout, and so on, and so on. I showed my group round the different teaching areas in the school. Afterwards we went back to the 'pod' - the small separate building that was to be our team area - and I explained about it being 'their' area. Then I left them for a bit as they seemed very tongue-tied, and asked one of my present fifth formers to talk to them. He said afterwards that they asked mainly about sport and music. They looked very small. We went off for coffee and of course they hadn't any money. I offered money to lend but they daren't say yes. We were all rather shy. Fifth and sixth years looked at us as if we were from another galaxy. I was glad when the time came to get on the coach again. They waved as they left. I have no special memories of Phil except that he was not at all forthcoming. The notes from his middle school gave the following information - address, birth date, reading age (14½), arithmetical age (11). They also mentioned that he was 'able' but 'underachieving', wanted to be a computer programmer, collects matchboxes and plays soccer for the school team. The headmaster did not mention him in particular as outstanding or specially worrying.

"I later met his parents at the first parents evening. This was to show the parents around the school and answer general questions, not specific ones about students. Over coffee his parents said that he was not happy at his middle school but felt that our system would suit him better. I was relieved. Until then I had half thought that Phil was not just shy but hostile, to the school or me or both. It was a good evening altogether. There were one or two arguments but they were productive, no useless chit chat, no 'do you push them enough'. The school looked impressive.

I got quite excited for the first time about the next year although my mind was still crowded with my present group and their work. I began to think that all the other teachers who felt rather dreary about going back into the fourth year (after spending two years with their previous groups) must be crazy. From this time my mind began to dwell more and more on the new group. I made an elaborate record book for next year - name, address, birth date, previous school/tutor, my own notes, annotated school notes, room for the timetable when it was worked out. It was important to do this to focus my mind on the group.

"By this time our new team of seven teachers were meeting informally whenever possible. Most of us had worked together before in the same team, two of us were new to the team. We spent some time discussing the place of mathematics in team work. In our last team maths had been completely separate from the rest of team work and had been taught by only one of us, the team mathematician. This time round we all wanted to share in the maths teaching in one way or another. Then we could begin to explore the relationships between maths and other team work. This time, too, we'd asked to have a scientist working in our team so that we could begin to introduce more scientific activities into the team work. I was glad that science would no longer be a wholly specialised activity outside the team framework.

"During the summer holidays I began to collect material and work out my ideas for the beginning of the year. By the end of term it had been clear that none of us felt the need to start the new year off with a grand, common theme - something like The Family with which we had begun our last team's work. We each had our own ideas about how we would start the term off in our own groups. We swopped ideas informally but there was no master plan. Some of my new students had asked for particular things - material for a project they were thinking of doing, a nursery school where they could work, a certain book or type of book. I got together a book on UFOs, material for tapestry making, ghost stories, 'The Life of a Robin' by David Lack. I read through once more all the books in the Penguin English Project series. I arranged a link between the team and a home for mentally handicapped children at Glenfield. At the very end of the holidays I wrote out an 'emergency banda' made up of suggestions for writing for students to try during the first few days, mostly autobiographical in theme.

"I came into school three days before the start of term. I find this very important personally although I do little of worth. I wander around, polish the tables, arrange the tables, rearrange the tables, think in sociometric terms about the tables. I clutter the noticeboards and walls with things and wish that I had more aesthetic sense. I made a decision to risk all from the beginning this year and brought in plants and various objects, hoping nothing got broken or spoiled (nothing has).

"It's important to start work as soon as the new students arrive but not simply to impose it - which is difficult when you don't really know the students. Various departments had laid on demonstrations or talks about the kinds of activities they offered, but they didn't seem to be very successful. I felt a bit apologetic and thought things were flagging almost immediately. I got angry with several teachers for not planning their sessions well enough, or so I thought. But the students didn't seem to mind as much as I did. They quite like to chat and circle around each other. By the second day I relaxed more and concentrated on talking individually to students in my group. I didn't leave my area at all.

"This is what Phil wrote at the end of his first day:- 'I saw new faces as soon as I walked into the pod. Some look friendly and some don't look friendly. I'll have to make friends with them sooner or later. The school is very big and I'll be glad when I know my way around. Countesthorpe is a different school entirely from my last. The teachers seem more friendly and there is much more better things to do. The classes, or pods as they are called here, are a lot more open and don't seal you in like the old fashioned classes at my last school did." We talked about this and about his timetable. On the basis of chats with his teachers at the other school, chats with me, and what he had heard from specialists here he chose the following subjects to study (in addition to what he would be studying in team time which would include maths, English, social studies and a variety of other things) - art, visual communication, music, control technology, chemistry, PE and games. He had changed his mind about German after talking it over with his parents. He was specially excited by the idea of Control Technology because of the construction involved, Music because of the possibility of using the organ and synthesiser, and Visual Communications because of a conversation with the person who was going to teach it who had talked about the possibilities of photography. Later he dropped PE and Games and said he would play five a side during team time if he felt the urge. He also added Typing at my suggestion. Here, then, is his present timetable:-

| Monday | Tuesday | Wednesday | Thursday | Friday |
|---|---|---|---|---|
| 1 Art | Maths | Music | Team | Maths |
| 2 Chem | Team | Typing | Team | Team |
| 3 Team | Vis.Com. | Chem | Team | C.Tech. |
| 4 Team | Typing | C.Tech. | Team | Team |

Each week he uses one of his team lessons to do some extra maths, normally Friday 2. I work with him on Monday afternoon, Tuesday morning, all day Thursday, and Friday morning. He is alone on Friday 4. It is an atypical timetable because of the Thursday when he works in the team area all day. But he says he enjoys planning that day most of all. I usually choose then to introduce something new, or at least to have something new handy. We also talk fairly formally then about the progress of all his work, in team and out. I still need to make quasi-formal arrangements to talk with him as he will not initiate a conversation. As soon as I speak though, he rattles on about his work, fishing, astronomy, the piano accordion.

"At the start of the term I'd suggested to Phil that he kept a journal. This is how he described his school life after two weeks. 'I have been at this school now for two weeks and now I have settled in and doing subjects I like to do and enjoy. Once you get to know the other students they are friendly towards you. When you get down to hard work, time seems to pass a lot quicker, but the first week we were just working out timetables and going to the different classes to see what the different subjects were like and so time seemed to drift slowly by! I like it at this school you learn things at your own pace and not like at my last school where for example in maths you go through different subjects in that category like an express train so you don't gather much knowledge."

"Phil has been at the school for six weeks now. He does not work quickly, but he sometimes takes work home to finish if it interests him or ideas are fresh in his mind. Sometimes I encourage him to do this, but more often he decides himself and tells me. His journal is no more. His first story was called Life of Gold, about explorers being eaten by ants. This was in response to my reading two equally horrifying short stories to the whole class. We talked about his story and I suggested that the theme would make a good poem. He agreed and wrote one quickly. It was a splendid rhyming ballad. We talked about poetry in general. In the process he altered the rhythm of one of the verses in his poem. He insists that poetry must rhyme. I said it needn't and gave him some poems, written by students, that don't rhyme. The only one that impressed him at all was one that got in by accident almost, with an insistent rhythm and very regular rhymes. He copied it into his exercise book he thought it was so good. I questioned him about his reading. We chose 'The Naked Sun' by Isaac Asimov. He has just finished it and is now going on to read an Evelyn Waugh novel he found in my box. From discussion about what makes a good book has emerged his own novel, 'Invasion', a science fiction story which promises to go on for several chapters. The subject is time travel and I have helped with technique while feverishly reading up about relativity. He tries to explain the scientific theories behind the plot to me. As yet the novel is in a rough state, but he shows me every page. He sometimes works in the library at this. He discovered the Thesaurus one day by chance while writing his novel there and changed the word 'shouted' to 'bawled'. Now he uses it regularly with great excitement. His other written work, apart from the now defunct journal, includes a piece about his friend's grandpa, written after I had read a small group some descriptive pieces, and the beginning of a short piece called 'The Book of the Dead' written after reading the ballad 'The Griesly Wife'.

"During the second week of term Phil told me that he would do some work in Astronomy after explaining about his telescope and how it worked. I was a bit worried that he felt he had to 'do a project'. This doesn't seem to be the case though as he is very interested to learn about nebulas and galaxies, partly in order to make his science fiction writing more convincing. Out of our conversations about astronomy we are now starting some historical work on the 'great figures' like Galileo and Copernicus.

"I soon found that we were both getting out of our depth in our struggle to understand relativity, despite a lot of reading and discussion. It was time to bring in outside help. I had already mentioned it to a sixth former studying physics and one morning we were given a lecture on the subject during team time. We felt that things were slightly clearer then but we still need more guidance. Luckily a student teacher working in the team at the time was the expert we were looking for and he plans to work quite closely with Phil and me on this topic.

"Other work that Phil has got involved in so far this term includes a survey of the birds in Countesthorpe which a friend in his class has started. I hoped that he might be interested in working around the theme of old age after I had read the piece about his friend's grandpa. He thought about it for a week but decided that he wasn't really interested. I was quite sorry about that. Then there's maths. Although I work quite closely with a few of my students on their maths work Phil is taught almost exclusively by the maths specialist. That's the way he prefers it at the moment and I am happy to leave it like this as long as both he and our maths specialist are satisfied with the way things are going.

"Phil's work has begun well. My main regret, looking back over the past six weeks, is that I haven't managed to interest him yet in some of the things that excite me most - like local history, or child development, or the kind of work that involves students in experience outside school. There are other students in my group who are already involved in one or other of these things but so far Phil has not chosen to be. As I continue to work with him one of my aims will be to try and convince him that these things are worth studying too."

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This account illustrates the character of the teacher's preparation before the year begins. Much of it is concerned with familiarising herself with her new students' intellectual backgrounds before the student arrives at school. Hence the visits to the student's previous school, meeting his parents, talking to him about his work and his interests, watching him during his first visit to Countesthorpe.

A second aspect of the teacher's preparation concerns the gathering of resources for the first few weeks' work. There is a strong emphasis on the quantity and variety of resources required to stimulate and sustain a student's work at the start of a year. The range is considerable - poems, stories and novels, books on a variety of topics, materials for particular projects already proposed by individual children, art materials, contacts with various local institutions where community work might take place, work sheets and suggestion sheets, plants, craft and art objects, wall decorations and displays. Equally notable is the individuality of these resources. The "common theme" embracing the work of all students in the team is deliberately rejected. Here resources are, from the outset, conceived in terms of each student's individual concerns, insofar as these can already be determined, although not all "teams" at Countesthorpe would dispense with "common themes".

The account also shows the importance of the teacher's pastoral guidance. Much of the teacher's concern during the six weeks described was concentrated on helping the student choose, and later revise, his timetable of activities and subjects for specialist study, as well as on seeking out areas of interest to him within the circle of team time activities. Her first suggestions for his writing were designed to encourage him to explore his first reactions to his new school, its life and work, while the teacher's early conversations with him revolved around his future course of study.

This overriding concern with pastoral guidance in the early days was inseparable from the teacher's academic concerns during team time. The autobiographical writing, the poetry, the first project or special study, the more or less formal interviews about his work, were all part of a way of learning and teaching as well as a way of getting to know each other.

It is striking how far already, in this early period, conversation was at the centre of teachers' and students' work, informing the student's choices and the teacher's guidance, and as a way of exploring the subject matter of their inquiries. In many ways it seems to be conversation that relates each of the teacher's many roles to the others. The account shows clearly how many roles the teacher plays; supervising the students' work, instructing or informing the whole class or smaller groups as in the story reading, stimulating, guiding and collaborating over a wide area of subject matter. The width of subject matter covered by the teacher is much greater than secondary school teachers are used to, reaching out beyond the entire humanities towards mathematics and science.

It is worth nothing also how the teacher makes use of the specialisms of others when she feels altogether out of her depth, as in the investigation of aspects of relativity. The conceptual range of teachers in Countesthorpe's teams varies greatly and it would be wrong to overemphasize the width of subject matter studied within team time itself. Many teachers at the school are even inclined to feel that the scope of activity in team time is unduly restricting. Nevertheless the context within which each teacher works within a team tends to extend the range of his own academic concerns and interests, as he involves himself in the variety of studies his students undertake.

- Episode Two: (by Michael Armstrong)

The beginnings of enquiry.

This episode about one student's work in the local community, was written some six weeks after the start of the enquiry. It describes how the study led to a fresh and original insight into the nature of the problem as work proceeded. The enquiry contined for some weeks after the events described here but it was not completed, since the student (in her sixth year) left school at the end of the term.

The study arose out of previous investigations this student had made during the course of the previous two years.

By far the greater part of my work and my colleagues' work at Countesthorpe is not yet of this kind. Much of it is still heavily didactic, rooted in the scholastic tradition and imprisoned by our own inflexibility of mind. (1)

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"Carol is a sixteen year old student who lives on a council estate on the outskirts of Leicester. She'd like to work with children eventually and she's hoping to get accepted for an NNEB training at the end of the year. (She was not, however, accepted and is now an office worker employed by the Inland Revenue. She still thinks of trying sometime to find a way of working with young children.) Towards the end of last term I asked her whether she'd like to spend one day a week this term working in a small village primary school about five miles away. A friend of mine taught there, I knew something of his work and admired and envied it, and I felt the experience would be valuable for Carol. By the time I talked it over with her I already had a good idea of what, in general terms, I hoped she would get out of it - experience of working with children, an opportunity to observe an exceptional teacher, and a chance to acquire, through experience and study, the beginnings of a general understanding of learning and development in young children.

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(1) The description that follows also appears as part of an essay written by Michael Armstrong for Forum, Vol.17, No.2, Reconstructing Knowledge: an example.

"Carol's attitude, I think, was that she would try it and see. 'I was expecting big things', she wrote later, but she was equally certain that she wouldn't stick at it if she found herself bored, frustrated or ignored, as I think she half suspected she might be.

"I didn't say much about the school before we first went, only that it was very small, that I'd been there and liked it a lot, and that I thought the teacher she'd be working with was rather exceptional. I warned her not to expect too much to begin with and I asked her to keep a regular diary of each week's visit.

"The first visit was quite a shock. Carol found she was far more constrained than she'd imagined. 'First I went to see the boys doing woodwork. I asked a little boy what he was making. He told me he was making a whale and that he was trying to make it smooth with some sandpaper, and that was it, end of conversation. I think he was dying to tell me all about the whale but I just couldn't find the words to say anything to him.'

"As she moved from group to group her response grew more complex. 'I went up to the top end of the room where Mike was reading with a little girl. Then he let me take over. I felt rather strange because things flashed through my head to when I was sitting on a tiny chair reading with a little piece of paper under the line so that you don't lose the line you're reading. It really took me back. I felt rather big, learning her new words, not big headed but that I was helping somebody to learn something new. After two pages of reading I thought I'd let her read on her own, as she seemed very nervous about it all and soon as I got up from the table she started chatting to her friends. I would have loved to know what she was saying about me.'

"Talking and writing about the morning afterwards helped Carol to clarify her feelings and to sharpen her perception but the disappointment of not getting on 'more freely' remained. The following week was worse if only because it was no better. When I came to pick Carol up at the end of the morning she seemed more worried because I was late than interested in what she'd been doing. I talked to her a little about what we might do to help things along and later I made one or two suggestions in her diary but she hadn't had time to read them before the next Friday came. On the way to the village that day she told me she wouldn't go again unless things worked out better. I was mildly worried.

"When I came back at the end of the morning, on time this time, she was really excited. All the way back in the car she chatted about what she'd done. I wasn't going to see her again before the following week and asked her to make sure to write everything up in her diary before it all slipped her mind. On the Monday she brought me the account that follows.

> 'I didn't fancy going this week at all, over the thought that not one child would talk to us or anything.
>
> 'Just before we got to the classroom thoughts went through my head that they would all turn round and stare at us again. I wish I knew what they thought of us, I think I'll ask them one day.
>
> 'Well as I expected they turned round and stared at us as if to say oh no not them again, but! nevertheless my mind didn't listen, I just went straight on in. First I went up to the boys. Well anybody could see they were dying for me to ask what they had got in their miniature garden, so I asked them. Well they had made a garden and planted lots of plants and grass and things like that. Then they had collected lots of insects and things like frogs and toads, slugs, ugh! I had to pretend I liked them but ugh! boys will be boys. They had put them in this miniature garden to see where different animals went to different surroundings. I thought it was a very good idea!, well we had a laugh, only because they frightened me to death. After speaking to them first I felt inclined to stay with them just because I had got to know them straight away but I decided to go and try and talk to some others but well I found them to turn to ice at the thought of me talking to them, worrying whether they were the ones I was going to choose. Still I don't blame them, I remember when I was their age, sitting on one of those tiny chairs sprawled over my book so the teacher couldn't see my writing, then all of a sudden I would sense a teacher or somebody looking over my shoulder, I would feel a hot flush go to my cheeks as I blush to myself, meanwhile my heart's going ten to the dozen.
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> 'I decided to look around and see some of the work the children had done, yet again I got fed up of that. Some of the girls were drawing pictures and then colouring them in with wax crayons. I was dying to do some drawing or painting or, well to admit it, I was dying to try what they were doing, so I went and got a piece of paper and sat in the corner where I thought nobody could see me. I was happily drawing away when I heard giggling. I looked up and I saw a crowd of girls watching me draw. One of the girls said 'what's that Carol'

> and I asked them to guess what I was drawing, not knowing that when I had finished they were still guessing. I had drawn a rose with lots of leaves around it, but the chilren thought it was a lettuce with privet leaves around it. We had lots of laughs and a few not so funny jokes about my drawing. This is where the relationship between the children and I began. They started calling me Carol and laughing and joking, I knew I had started something.
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> 'They all went to break and I stayed and coloured my drawing. I had nearly finished my lovely bright red rose with bright green leaves and a blue background when the children came back in. Well, was I shocked at the comments I got from 10-11 year old kids.
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> a) Oh Carol that's absolutely fabulous,
> b) Oh isn't that beautiful Carol,
> c) Oh Carol! and so on and so on. I felt rather an artist. One girl gave me a good talking to and told me (told me) mind you that I should be an art teacher and go and teach them.
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> 'After finishing the drawing somebody wanted the pleasure of screwing my so called fabulous picture up. This was to make cracks in the wax to give an old looking effect.
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> 'The kids argued over screwing it up, until of course Byron (the class teacher) spoke up 'let me have the pleasure please' so he stood there in front of me screwing it up while the kids watched my face drop. After he ironed it and I painted it, I was told it looked very nice. After that I got on great with the kids. I was quite amazed with the difference it had made just joining in with them. It was dinner and they said goodbye. Mike came to pick us up.'

" I don't think I've ever read a more truthful account of the transition from stranger to friend, or observer to participant, whether in the context of a primary school classroom or elsewhere. It opens with the desperation that accompanies a sense that the people you want to get to know are at heart inaccessible. It picks out the constricting shame and embarrassment small children often feel at an invasion of the privacy of their work, especially of their writing - a vital insight to anyone who wants to teach. It acknowledges, wryly, the difficulty of sharing those pleasures of others which touch upon your own squeamishness. And then, out of an awareness of the stubborn self-absorption of this classroom of children emerges a beautifully precise and unforced appreciation of how a relationship can begin.

"Carol's technique was to assume the same self-absorption as the others, drawing away alone in a corner - an intuition I had in no way hinted at to her and would probably have imagined to be fruitless. The effects it had on the children are noted with great faithfulness and clarity - from giggling to joking to calling her by name and finally to congratulation and serious conversation. When she 'joined in' Carol had not yet read what I had written in her book about 'taking your own drawings along with you and doing them alongside the children', but even if she had, I would not have foreseen just how she would set about joining in nor how clearly she would perceive the significance of her action.

"Besides its central perception Carol's piece is full of incidental appreciation of children's responses. She shows an immediate understanding of the importance of playfulness - of interpreting the rose as a lettuce, of 'the pleasure of screwing my so called fabulous picture up'. She is aware, too, of the element of competitiveness and desire for recognition in the repetitive fulsomeness of the children's responses to her work and even, on a later occasion, to her clothes: 'Then after all these remarks a strange thing happened. A girl said that's a beautiful bracelet Carol, I do like it very much, and I said thank you. Then another girl proceeded in saying I do like your necklace Carol. it's very pretty, I said thank you. THEN Oh Carol I like your shirt, then, I like your trousers, I like your shoes and so on. It was very funny, it was like after one said it the others felt they had to say something to get a thank you from me or something like that.'

"Later still, chatting over another day's visits Carol told me of the girl who'd sat next to her most of the morning, constantly looking over her work and saying how lovely it was and how much inferior her own work was by comparison. Once, when Carol had failed to reassure her the girl, after a pause, had added half to herself 'perhaps mine isn't really so bad'. We spent quite a time on the significance of this reaction.

"Six weeks have passed since our first visit to Dunton Bassett and I can begin to reflect on what each of us has achieved so far out of our experience. Part of Carol's achievement, I think, is to have rediscovered her own childhood. It may even be just because she has rediscovered her own childhood that she has also discovered how to enter imaginatively into the childhood of others and so how to talk to children and work with them and study them. Each discovery has emerged in part out of experience and intuition and in part out of reflecting on experience and intuition in talk and in writing. And both the talk and the writing have been 'conversational' in essence and in tone.

"As for me, I feel that, reading what Carol has written, talking over her experience with her, and spending some time in the same classroom myself, has enriched my understanding of how to observe children and how to create relationships with them, in ways which I would not have discovered for myself.

"When it comes to our future course of study I can only make the most preliminary observations. In a sense I know perfectly well what kind of direction I would like it to take. I would like to help Carol to deepen her understanding of the class by developing further those techniques of observation and participation whose essence she has already understood intuitively. I would like to help her to develop the skills of teaching. I also hope that eventually she will begin to investigate at a more general level the nature of cognitive growth. I am equally certain that all of these lines of development will prove to be lines of development for me as well as for Carol.

"One important step is to try to involve the teacher of the class she is working in more directly with her own study. By his example and his conversation he would be able to help her more than anyone I know towards a general understanding of how small children learn. Another step, of course, is to interest her in the literature of child development. I have started by asking her to look over a beautiful short study of kindergarten children by Frances Hawdins, The Logic of Action, which I will later work through with her. (These strategies were tried out during the remaining half term before Carol left school, with varying degrees of success and failure.)

"However, the literature presents innumerable problems, both in general, because of its insupportable abstractions and its impoverished vocabulary, and in particular, because Carol is one of those people whose extreme slowness at reading has developed into a genuine aversion to it. None theless I don't despair of being able in some measure to resolve the reading problem. But what I know I must try to avoid at all costs is the splitting apart of the generalisations and the conceptualizations from that intuitive grasp of particularity which has been Carol's supreme advantage over the past few weeks.

"It is enormously difficult for secondary school teachers like myself to avoid this splitting of knowledge. The shift into a formal mode of learning is so often accompanied by a dry didacticism in which contact with particular forms of life is lost. Techniques abound, concepts proliferate, but somehow they never lead back to observation and participation in those particular circumstances where it is necessary once more to search and explore, with an open mind, wide sympathy and as much imagination as one can muster.

"This stage of transition to more formal modes of learning marks the point at which so many of my own students' fruitful experiences seem to wither away. Often our more sympathetic critics tell us that this is because we have ignored the need for precision in learning after the initial romance, or because we have under-estimated the necessary grind inherent in any effort at intellectual mastery. Part of my answer would be to point once more to Carol's writing and talking. Informality does not imply carelessness nor any lack of intellectual control. I would point to the lack of irrelevancies in the extract I have quoted from her diary, and to its sharp sense of what is significant. It is a piece of critical discrimination of a high order. Another part of my answer would be to suggest the interconnectedness of imaginative insight and patient toil. It is not a matter of one succeeding the other but of both being part of each other.

"However I would be prepared to concede that the criticism has a certain force. Yet it should not disguise the more fundamental problem. For the reintegration of formal and informal modes of learning, of the lecture and the conversation if you like, itself requires a substantial reconstruction of knowledge. Somehow or other we are seeking to extend a power of generalisation and conceptualization without losing the strength of an understanding which is rooted in a sense of particularity. But how?"

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The account of this student's inquiry concentrates on the exploratory aspect of her work. Here the teacher's role, in the early phase of such an investigation, is to furnish the environment within which the investigation can proceed. In this instance that meant finding a nearby school willing to let the student in as a participant observer and a teacher keen to help her observation and participation along. The teacher also had to provide background information to help the student develop a suitable framework for her inquiry. Then, the teacher's role, in this exploratory aspect of a student's work, becomes one of watching, listening, reading, and responding sympathetically to the student's insights, confusions, enthusiasms and disappointments. In this case, I read and commented on the girl's weekly diary of visits, watched her at work in the classroom from time to time, listened to her chatting about her morning's activity after it was over, offering an occasional idea or suggestion, trying to draw her out, wondering how I might bring to bear my own less intuitive, more abstract, understanding on the progress of her work.

But it would be wrong to see the teacher's responses in terms only of their effect on the student. In the most successful inquiries, we think, the teacher too is likely to find his understanding transformed, or deepened, by the process of collaboration.

As will be seen here only after some exploration and conversation did the shape and direction of the inquiry begin to emerge. We think that it is only then that fuller provision can be made for successive stages of the inquiry. This is why a teacher's planning, in a 'team', however thorough, is tentative. The course of an inquiry often forces the teacher to revise plans and materials, to reformulate his particular objectives, and even rewrite the curriculum - a reconstruction of the nature of the particular inquiry. It is this improvisatory quality which seems to me to be the hardest to master and the most important to possess."

- Episode Three: (by Michael Armstrong)

Developing an understanding: outline of a year's inquiry into social disadvantage.

This enquiry started from a sequence of personal experiences, extended by the teacher to embrace the theoretical perspectives of a sociologist and returns to the personal experience.

During her fourth year, poetry was this student's chief intellectual passion. In the course of that year she must have written scores of poems, each one copied out first into the school exercise books in which she kept all her "creative writing" and then into a special book which she used simply for her own poems. I began to encourage her to write more, showing her poems, writing them in her exercise book, talking to her about the poems she was beginning to write herself.

She was frequently unimpressed by my criticisms and as her confidence grew she began to try to answer them. My own view of poetry, both of this student's poetry and of poetry in general, began to change under the impact of our conversations.

I use the word conversation and yet often the mutual exchange was almost silent, a matter of long pauses for reflection interspersed with brief snatches of talk, a process that proceeded all year. It was not a sequence of lessons, nor of readings, nor of deliberate critical appreciations, nor through practice at writing in particular forms, but in a decidedly informal, piecemeal and improvisatory manner.

Creative writing, and reading, so dominated this girl's "fourth" year that at one time I worried whether she would ever get involved in other aspects of her work within the team - for instance social studies, history, which she was studying as a specialism within team time - although she worked hard enough at the particular tasks in her group. One such topic concerned the problem of housing in large cities. This girl, indignant at the plight of the homeless, as outlined in the material she was studying (most of it based on one particular worksheet), wrote with considerable passion on the subject.

A related concern finally engaged her in the study of society, at the start of her second year in the school, the "fifth year". At that time she began to visit an old lady who lived down the road from her own home, suffering from senile dementia. The occasion for visiting the old lady arose partly out of the girl's work in Community Studies, a specialist course leading to a CSE examination at the end of the fifth year. Part of the course entailed working within the local community and keeping a record of work.

It is worth noting here that the girl's teacher for Community Studies was not one of the teachers in her team, but a teacher who specialised in Community Studies. She and I worked closely together so that much of the work initiated in her Community Studies lessons was continued by myself in "team" time and vice versa. Collaboration of this kind between specialist and "team" teachers is not uncommon although on this occasion it was probably more continuous and thoroughgoing than it often turns out to be. Most teachers within the teams, however, would argue that some such collaboration is a necessary condition of achieving their objectives in the long run.

At around the same time, this particular student had begun work as a voluntary helper once a fortnight in the occupational therapy wing, and later the children's ward, of a nearby mental hospital. Beyond the requirements of the CSE Community Studies Examination Syllabus lay her growing concern about problems of welfare and disadvantage, a desire to understand these problems, and to help alleviate or resolve them. This concern is best expressed in the girl's own words, in an introductory note she wrote some time later to the "project" which emerged out of these and other visits.

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"Why I chose this subject: (Jenny Bowles)

"I chose it because I feel very concerned for people with problems. There are many people with grave social disadvantages today through no fault of their own and by doing this study I feel I will learn of these problems in more detail. The study has made me realise just how lucky I am compared to some of the people I met or read about.

"By visiting places and meeting people, I really began to realise the kind and order of problems which these people are up against.

"My aim is to find out the problems of several groups of people who are a part of this 'social minority' and suggest possible changes and alternatives."

* * * *

As the previous episodes described in this study have shown, direct first hand experience of working and studying within the local community has always been an important element in most team's work, something which students have been encouraged to participate in (though it is still only a minority who do participate to any extent).

This girl's programme of visits was a development in her work which delighted me; from the outset it seemed to open up for her a new world of interest and understanding. The visits continued throughout the year, up until the time of the summer examinations in May and June. Thirty visits to the old lady are recorded in the girl's diary from September up to the time the old lady died in February. Most of them took place after school or during weekends but occasionally the student would ask if she could leave school early.

Meanwhile, once a fortnight, the same girl, with three or four other students and myself, were visiting a local hospital for the mentally handicapped, some five miles away, to work as voluntary helpers in the occupational therapy ward or the children's ward. At first the girl only came to the hospital as a casual observer, not intending to stay on as a voluntary helper. But she was so impressed, and so disturbed, that she decided to visit regularly. My own participation in these afternoons at the hospital began when the other students working in the children's ward of the hospital complained of the way they were left in charge by the nurses with no help to call on. I went with them one afternoon to see how things were, and decided to continue accompanying them, not so much to help them in their work as to offer some kind of security. Soon however I was as much involved in the life of the ward as they were, and would not have thought of staying behind. (It happened that the afternoon in question was a 'free' afternoon for me, so that the fortnightly visits did not take me away from the rest of my team work.)

Like other students involved in community work or study this girl had been asked to keep a diary of her visits, recording her impressions, observations, and reflections. To read through these notes and observations is to catch sight once again of that intuitive sympathy and understanding which were so much a characteristic of the student's record described in Episode Two; it is also to watch the intuition and understanding deepen and expand through the sustained effort of observation, reflection and recording.

Looking back now, it seems especially important that this girl should have felt a certain obligation to write, as well as an urge to do so.

* * * *

During the opening phase in the programme of studies to which this girl's visits led - (the word "programme" may be misleading, inasmuch as the studies which arose out of her visits were not predetermined though they were certainly planned for and thought about, both in advance and as they continued) - my own role as her teacher, working at times with the Community Studies teacher was chiefly one of listening, reading, talking things over, and, in the case of the visits to the hospital, collaborating. Much of my talk with the student was a simple sharing of experience, recounting what had happened, expressing our immediate feelings about it. But I was also trying to help her to generalise from her experience and to introduce her to some of the relevant literature or other sources of information. I began to discuss with her, as occasion arose, the problems of old age and of institutional life; we discovered what we could about senile dementia, about the origin, nature and treatment of mental handicap, about the available welfare services for the old and the handicapped; the student was continually asking what could be done to solve the problems she was exploring. I looked for books, pamphlets, and agencies which might be of value to her, and to me. Her own list, drawn up on the completion of her work, mentions a sociological study of mental hospitals, which she struggled with from time to time, leaflets and pamphlets from a voluntary organisation concerned with old people, a report on "disadvantaged" children and a BBC publication concerned with mental illness and handicap.

As time went on the student began to extend the range of her first hand experience of the problems under investigation. She spent several Saturdays, with another student, at a residential village for handicapped adolescents and adults some miles away in the countryside and was astonished at the difference between life there and life in the children's ward at the hospital. She visited a hospital for the old in the middle of Leicester, and a school for handicapped children nearby.

I also began, after some time, to try and relate her new experiences to the study of sociology, which she had chosen to take at O level and which she was finding hard going. One book which seemed to me to get close to her own chief interests was a collection of essays by a sociologist (1) which combined personal insight and the reflection on personal experience with sociological analysis. I felt she would be able to respond to and learn from its manner, though she would find it hard, but she persevered.

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(1) The Social Minority, Peter Townsend,

It was at this point in her studies that we decided jointly to bring together her work on the old and the mentally handicapped, along with other studies, perhaps, - of disadvantaged children, of immigrants, of the unemployed - into a general study of social disadvantage. She was taking a CSE examination in Social Studies at the end of the year (this was a separate examination from the CSE in Community Studies mentioned above) and the main part of the exam consisted of an individual project to be submitted for examination around April.

We agreed that her study would include her experiences at the hospital for the mentally handicapped, at the residential village, and with the old lady, drawing on the diaries which she had kept. Later she added a section on "socially disadvantaged" children, based on the literature of disadvantage (although other projected topics, such as one on immigrants, had to be abandoned for lack of time). The diaries and notebooks were supplemented by factual information, statistics, and by personal reflections based on her first hand experience, her discussions with teachers and students and other evidence.

By far the most striking feature of the finished study are the diaries and notes on her visits. But the finished study also shows how, over the year's work, the student's thinking had begun to relate the particular and the general. She was beginning to balance intuition with a slowly increasing mastery of conceptualisation and generalisation. I was disappointed that I had not succeeded in helping her to achieve the same degree of mastery of the generalisations as she displayed when it came to the grasp of particularity. But her course of study, as represented in its written record and as displayed in her subsequent thought and action, seemed to demonstrate something of what our teachers aim at in working with students.

## TEACHERS OTHER TASKS: PERSONAL DEVELOPMENT

### - Episode Four: (by Bob Evans)

Our in-service training: how can we enhance and develop the self-directed learning undertaken by our students?

This episode concerns an informal study group of the college's teachers. Some of us wanted to mull over our experience, to analyse the nature of our classroom learning and to explore new ways of encouraging, sustaining and evaluating the course of learning in our particular school environment.

The study group's discussions were later followed by a series of fortnightly meetings, for a wider group, a reflection of a growing concern among teachers with their own in-service education.

Our invitation to our colleagues gives the flavour of our ideas.

* * * *

"The longer we teach here the more sure we are that students learn best when they are self-directed and that every student is capable of taking advantage of the freedom to direct his own learning granted the help and support of his teachers.

"But the longer we teach here the more aware we become of just how little any of us yet know about how to help each student to make the most of his opportunity to direct his own learning - about how learning proceeds under the condition of freedom, about how to stimulate and sustain it, about what the proper help and support is which we say we should, as teachers, be giving.

"During the past two years we have talked over these doubts and certainties many times, both between ourselves and with others, in our respective teams or in other parts of the school or other schools. We have also tried to write about the doubts and certainties, occasionally for publication but more often to satisfy ourselves.

"We think it is time to gather the experience we have all acquired as teachers at Countesthorpe and use it to explore together, in a more or less systematic way, the problems and opportunities of self-directed learning, both here at Countesthorpe and elsewhere. There is no other way to make sure the school fulfils its promise.

"There are different ways of exploring the nature of learning here. One is by writing about our own individual experience as teachers, describing and analysing our work with our students. Another is through creative workshops in which we try to extend our own knowledge, skill and imagination, in science, maths, literature, the social studies, art, physical education or whatever. A third is through sustained discussion, conversation and study. A fourth is by way of research.

"It is the third way on which we would like to concentrate ourselves. We would like to set up a regular informal study group meeting once a fortnight or once every three weeks in the evening in different people's homes.

"We are at present thinking of starting off the first meeting by introducing two accounts of particular episodes in teaching which the two of us have been trying to write up during the past few weeks. We would very much welcome any other writing which people have done recently and which might help to focus the beginnings of the study group's work."

* * * *

At the first meeting of the group, the author presented for discussion some reflections on the work of a fifth year student, who had been engaged on a long standing inquiry into her family's history, which was then discussed.

At the group's second meeting a teacher from another fifth year team presented a paper in which he reflected on the implications of an episode in his teaching and the problems and possibilities suggested by an appraisal of the incident described.

To us this episode serves as an indication of how much remains to be discovered about how students learn in educational contexts which are designed to encourage self-direction, and the implications for teachers who want to help their students.

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I was asked to begin the second meeting by elaborating further the example which I introduced at the last meeting. My initial reaction was that treading the same ground again might prove fruitless but on reflection it seemed that it was possible to go over a specific example without exhausting its power to illuminate. This being so I shall give an account of what happened when one of my fourth year students and myself visited the lodge of Holkham Hall, Norfolk. It seems of great importance that the practice of discussing particular examples in depth should be continued in order to link educational theorising to something concrete which we can all get our teeth into.

Having described the experience I would like to attempt to analyse it by looking at the following:

1) How it arose.

2) What was achieved.

3) How it might have been extended.

Last summer term I went to Wells, Norfolk, on our usual summer camp taking a small number of students. One afternoon, midway through our stay, four staff and half a dozen students set off on a walk to Holkham Hall which was two or three miles down the coast. We decided to see an exhibition of old photographs of Wells. The exhibition was quite large - about 200 photographs were on display, many of them blow-ups of post cards. The catalogue told me that the span of time covered by the photographs was from about 1860 to 1940 and gave a description and date for each of them. I was enthralled by these superb reproductions and, with catalogue in hand, I started to examine each one whilst making a guess as to the date. The catalogue provided instant feedback on the accuracy of my guesses. Almost as soon as I started doing this I drew the student into the activity without any sort of overt pedagogic intention and we commenced to compete with each other, each in turn making a guess and then looking up the correct date in the catalogue.

Having begun the guessing game some way down the line of photographs we returned to the start and proceeded to go through them systematically. It quickly became clear to both of us that there was more to successful prediction of the correct date than simply "guessing". Accuracy could be increased by carefully accumulating knowledge and manipulating it logically, e.g., you knew the photo in front of you must be after 1875 because the large granary which stands by the quay was on it and you had discovered when this was built from a previous photograph of navvies building it; you also knew it could not be so late as 1900 because of the hats the men on it were wearing since you had established a rough guide to dating by observing the rapid changes in the fashion of working men's hats in previous photographs. In this way a battery of dating criteria was developed and refined as the amount of information increased with the perusal of each new photograph. The knowledge which we constructed together revolved around clothing fashions, transport, buildings, advertising and even styles of facial hair. Used in conjunction it was possible to make fairly accurate guesses according to these criteria.

The rest of the group had long since vanished but my student urged me on and I discovered a second wind. In the final room we had the good fortune to encounter an old man who, seeing our fascination with the photographs, approached us and told us that some of them were his. He proceeded to bequeath to us a further mine of information which we listened to with interest and thus increased our stock of knowledge. Finally, having left no photograph unseen and undated we retreated downstairs and expressed amazement that no one else was around; we had been immersed in dating for two hours!

There the story ends; it was not an experience that triggered off a wonderful "project" though it could have done. In some way it was complete in itself and required no further elaboration. So once the experience was over no visible sign remained. No word has found its way onto paper until now. This raises certain key issues about the way learning takes place and our role as teachers in nurturing this process: is it sufficient to say that the experience was complete in itself and to pass on to other things or should there be some kind of development from it? If so, what kind? Before going on to discuss this point further I would like to consider how the learning experience arose in the first place and it seems to me that the following conditions were relevant though not all of them are necessary:

1) It was an out-of-school context (though what "out-of-school" means here is problematic).

2) It was a context where the student was isolated from the peer group.

3) It was a context where a close rapport had been established with the teacher.

4) It arose "serendipitously".

5) Certain resources were available:
    i) a superb collection of old photographs
    ii) a catalogue providing instant feedback of information.

6) It was in the context of a game.

7) It was in a context where the teacher showed enthusiasm and the student some initial interest.

8) The student was a slow reader and poor writer but able orally and equipped with a notable ability to think logically - he was quite good at maths and enjoyed playing games like "Mastermind".

9) The main stimulus was visual though it occurred in a context of conversation.

10) Circumstances allowed us to spend the required amount of time on the task which gave the experience unity.

11) It was a one-to-one situation between teacher and student.

The implications of these conditions are many and each is capable of forming the basis of a discussion. Rather than elaborating on them here I'll leave this list to stand as a set of issues to be discussed.

Secondly, what was achieved?

I suggest the following:

1) An increased sense of the past and its relationship to the present, in terms of both change and continuity.

2) A precise sense of dating through a variety of hitherto unthought of criteria.

3) A sense of how we can manipulate evidence to increase our stock of knowledge.

4) A feeling of discovery and enjoyment of an intellectual exercise for no end other than the pleasure of doing it.

5) A sense of rapport emanating from mutual cooperation between teacher and student.

But, what was not achieved? In looking at the incident critically in the context of the ongoing development of the student as a learner the following deficiencies seem to merit examination:

1) The knowledge created was a considerable breakthrough for the student but it was capable of further enhancement. It was relatively imprecise and patchy and study of these methods of dating used by reference to books of a social historical kind would have added refinement to these procedures.

2) The experience was not part of a larger pattern of increased mastery of this area of knowledge. It did not lead onto, or connect up with, further experiences in any satisfactory way. Complete in itself it may have been but the student showed a definite aptitude, a vast potential, which, for one reason or another was not developed.

3) The skills used were observation and reasoning skills and other important skills were not called into play e.g., reading and using books, writing and composing, using other sources of information. The student could have benefitted from this since he has considerable technical weaknesses in these areas. His very ineptitude at these tasks, ironically, leads him to avoid them.

Thus, a great deal was achieved in situ, but it did not lead onto other activities which enhanced and extended this achievement. This is a common experience for staff and students at Countesthorpe; for example, when students see a film they may enjoy it but do not try to follow it up in any way. It may add to their stock of experiences and since it is probably shared with their teacher it may be called upon at a later date when its relevance is perceived. It is not my intention to urge that all such experiences should be "followed up"; they are valuable in themselves, to be enjoyed at the time in the fullness of the moment. On the other hand is it not a crucial task of the teacher to extract the most from his students and the learning situations that occur, whether planned or unpremeditated? Do we not have a responsibility to overcome fragmented and isolated experiences by welding them into something which is coherent and accumulative? A mistake that we tend to make when we talk about "follow-up" is that we are far too gross and unsubtle in our thinking; it need not be "That was interesting! Why don't you do a project on it?" It might simply be a case of storing the memory after having reflected upon it until another situation arises where it can be developed, not necessarily in terms of its particular content but in terms of the type of activity or the type of intellectual skills involved.

So, how might this experience have been extended and why wasn't it?

Here are a few ideas about various kinds of follow-up:

1) Through photography: this seemed very appropriate and the kind of activity which might act as a bridge between the initial experience and the various sorts of reading/writing school-based activity. We could have taken photographs from vantage points similar to the historic photographs of Wells and compared them.

2) The experience could have been transposed to the local Countesthorpe context. A campaign to collect old photographs of Countesthorpe could have been launched and these could have been used as the basis of the work, perhaps creating a pictorial history. Other information, e.g., from maps, could have been hung on to the photographs collected. Eventually we might have exhibited our findings. The student taking his own photographs could have been a further element in this.

3) The basic notion of "dating" could have been used as a way to explore a variety of things, e.g., dating old bottles and other domestic objects from old rubbish heaps, dating trees, buildings, roads, fields, antiques. It is significant that about a year later whe **my student** expressed his enthusiasm for the "Going for a song" TV programme which is concerned with dating and valuing antiques I failed to make the connection and the opportunity went begging.

4) I should have thought much harder about what the experience meant at the time in terms of the aptitudes displayed by **my student and the probable** activities which he might profitably undertake: the use of games and problem-solving activities, ways of making study of the past exciting and rewarding, more practical tasks than the bookish ones which tend to predominate. Follow-up might have meant more something which I did in terms of reflecting carefully about the implications of the initial experience than any actual further work immediately undertaken by the student, although to engage him on some further profitable task would have been one of my uppermost concerns.

It is clear that the great possibilities to develop our mutual experience were not exploited. In the last part of the paper I would like to consider why not.

1) My own feeling at the time was that what happened to my student and myself that afternoon was perfect and that nothing need be done to complete it. The idea of "following it up" was therefore rendered unappealing since it seemed to detract in some way from the fullness of those two hours in the photographic exhibition. This reaction does seem attractive but having thought about it again I think I was far too naive about it and didn't think it through with the necessary rigour. The dichotomy suggested between the experience which is complete in itself and one which is "followed up" may be a false and misleading one. An experience may possess that quality of fullness but to attempt to enhance it by creating further experiences related in some way may not detract from its richness depending upon how it is done. It is easy to see that the "you've had an experience, now write about it" type of follow up can seem unsubtle and brutish but other more sensitive ways of enhancing the key experience may be alighted upon.

2) This educational experience took place in a context which was "de-schooled" to a considerable extent. At the camp the ways in which experience is typically framed in school and the institutional routines which support such framing were in a state of abeyance. For example, the typical temporal structure of the school dividing the day into formal units marked by bells was replaced by a completely different approach to the structuring of time which had nothing to do with the requirements of formal organisation. The division between home-time and schooltime was also an element in the restructuring of the day as an undifferentiated whole. This helped to create a climate in which our experience was centred on the fullness of the present rather than in terms of a sequence of formally defined units of time with the concomitant expectations about what should be happening and the attendant degree of tension. It was possible to give oneself totally to an activity because you could take whatever time was needed to do it without considering how this might be fitted into some kind of formal routine. Compared with this the return to school marked a transition to a very different social world dominated by formal routines and expectations. I am suggesting that because of this, serendipitous events like the one I have described are far less likely to occur. A further way in which the return to a school environment is felt is in a partial return to a more antagonistic teacher/student relationship in which both parties become more aware of their formal responsibilities and the conflict situation which results.

An effect of the camp situation was to blur the distinction between work and leisure of "play". My student was able to launch himself into a high-powered intellectual exercise because it did not occur to him to define the activity as "work", i.e., something intrinsically unpleasant and to be avoided or suffered stoically. The opposition between work and play was not relevant to life at the camp. However, return to school entailed the resumption of the dichotomous division of work and play. Activities suggested by teachers were, by definition "work" since this was the expected role of the teacher and were regarded as unpleasant until proved otherwise. This created a problem of motivation which did not exist in the out-of-school context. What might be termed the "Protestant Work Ethic" is widely shared by school students who bring these beliefs into school from the wider society. A further element of this philosophy of work is that work should be "useful" and work activities without apparent utility are devalued. Beliefs in the utility of work may be arbitrary and irrational there being no meaningful connection between the activity and the "use" e.g., simply working to pass an exam to qualify for an unrelated job. It may be that we reinforce these attitudes by what we do in school although it runs counter to our professed ideology.

3) Once back in school my student rejoined his friendship group - only two of his friends had been at the camp. This group of "lads" was not primarily interested in "self-directed learning" but in group sponsored activities such as chatting about what they did in the evenings on the streets of Countesthorpe, fishing, football, sex, TV, each other. Quite a bit of school time was spent organising their own fun in the group and they were prone to what I call "messing about". As a member of the group it was hard to coax him into concentrating his attention on a specific activity. His lack of commitment meant that very little managed to get done. He was reluctant to do anything by himself which separated him from the ambience of the friendship group. If he worked in the company of his friends it would tend not to be done very well, if at all. This constituted a very real barrier to developing his intellectual mastery. It should not be assumed that this kind of group influence was general throughout the group, on the contrary, some members were capable of separating themselves from sociable chat and work in an autonomous and industrious fashion.

No part of this analysis is meant to offer a complete description or explanation of events. It is an attempt to make some sense of what happened and to ask relevant questions which can contribute towards our understanding of how students learn and how we can best help them. In the last section of this paper I have drawn attention to questions concerning the nature of our school as a context in which self-directed learning can take place, particularly with regard to what I have called "serendipity" (the accuracy of this description might well be challenged), attitudes towards work and leisure, how we contribute to or reinforce them and how we can change them and, finally, the role of certain types of peer group in creating barriers to the development of self-directed learning. Writing about this has increased my awareness of a number of issues not the least of which is the danger of thinking of some of our students as "non-academic" simply because they refuse to respond to a more usual curricular diet. In the right circumstances my student produced an intellectual tour de force; the implication that I draw from this is that most of our students have interests and aptitudes of an essentially "academic" kind. Our task is to become sensitive to what they are and to create contexts in which they can become manifest.

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I hope this example and attendant comments will help us to ask questions though, of course, this process has been going on for some time; at least it may provide further fuel to throw on fires which are already burning.

## FUTURE POSSIBILITIES

### - Episode Five. (Michael Armstrong and Eric Green)

The "non-team" science department.

The school's specialist departments, art and design, foreign languages and the science departments, especially physics, offer styles of teaching and learning which contrast greatly with those of the "teams".

In the final episode I want to give my personal reflections, drawing on a document by the head of the physics department.

The science department have a tightness of structure, a systematic quality which the teams generally lack. In studying physics, for example, a student is much more subject to teacher direction even though he proceeds at his own pace through his course of study. The sequence of his activity, its structure, the range of choice he is allowed are determined in substantial detail in advance, either by the teacher directly or by the pattern of guide sheets, work sheets, and appropriate illustrative materials, which constitute the basic course of study for every student.

One reason for the difference between teaching in the science department and in the teams doubtless lies in the nature of scientific as opposed to humanistic inquiry. A second reason lies in the fact that the students working within the science department have already chosen science as a specialist pursuit and may thus be expected to have at least a minimum commitment to its study. However the importance of the student's choice of science can easily be exaggerated. Most tutors see it as their business to encourage as many of their students as they can to study at least some specialist science, in the interests of a balanced curriculum.

A third (and important) reason lies in the school's history. The science department was heavily committed, at the start, to the methods espoused by the Nuffield Foundation's Curriculum Projects, and in particular the Resources for Learning Project with its emphasis on work sheets as a method of working at an individual pace through a course and on the lessons to be learned from the techniques of "programmed learning" or "computer assisted instruction". The head of the science department has not been particularly attracted by the team idea of self-direction.

The account prepared by the head of department for the inspector's visit in 1973 (see below ) is a clear statement of the early position and may be contrasted with the "team" submission for the same visit.

To the author, this report demonstrates clearly the differences between the style of teaching and learning to be found in one particular specialist department and that found in the "teams", concerning not so much teaching methods, the use of resources, or methods of assessment, as the interrelationships between teachers, students, and the subject matter of their study.

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Mixed ability classes in comprehensive and other secondary schools are a result of the recent and growing development of our thinking in secondary education. This situation holds considerable implications with regard to our teaching of science, and also reminds us that education should be related to the age, ability and aptitude of the individual child. In spite of these changes much of our science is still class taught, which seems a very dubious method of conducting scientific enquiry and contrary in spirit. Our methods can and should be based more emphatically on the individual.

Further to the school's general aims, we would add:

1. The development of a multiplicity of learning sequences, both structured and unstructured, and

2. The existence of mixed age as well as mixed ability groups.

## Methodology

The students involved in this development are those in the fourth and fifth years who have opted to do Physics. The proportion of "less able" students is small compared with the proportion of such students in Biology (i.e. relatively few "less able" students choose to study specialist Physics).

"Physics" is an umbrella word describing three main kinds of activity which take place in the physics laboratory:

1. A course in Nuffield Physics. This course has been individualised using the materials and development as presented in the Nuffield Physics publications, with the intention of making additions of loops, programmed material and diversions.

2. A course in Basic Electronics. This course has been individualised using the materials supplied by the Project Technology group at Loughborough. Their development has been followed.

3. Science Units. These are self contained units of work which a student can choose to follow, e.g.,

   Photography. The elements of processing in black and white; enlarging; the use of the camera; other additions depending on the interests and abilities of the students.

   Make Your Own Radio. This is a development of the BBC programme and has benefitted from the help of video-tape equipment.

In all the above activities, especially the first two, the maximum possible variety of presentation of ideas has been aimed for, this emphasis being represented by the development of worksheets, test sheets, project sheets, information sheets, guide sheets, check lists, video-tapes, 16 mm. film, 8 mm. film cassettes, teacher demonstration and group teaching. It is thought that the guide sheet and the check list are of fundamental importance in this individualised approach. The guide points the student to the materials with which he must work and the check list enables the teacher to know the stage at which each student is in the work, thereby enabling the planning of group teaching.

Both student and teacher have many points in the courses at which choice can be made as to the kind and degree of work carried out. For some, all tests should be attempted, all projects worked out, whereas for others, less demands should be made. Decisions of this kind are obviously easier and more effectively made with increasing personal knowledge of the student concerned.

## Principles Involved in the Development of Materials and Aids

In sketching out the general method of approach, a number of terms have been referred to which require some explanation and definition:

1) The basic course. This means completing the sequence of worksheets, test sheets, film loops, etc., in the order set out in the guide sheet.

2) Loops, diversions and programmed material. These all represent extensions of the basic course to serve the particular needs of some students.

   A loop means a more carefully graded development between stages in the basic course. If a student follows a loop it means that he has reached a point of difficulty where the conceptual steps involved are too great. At the moment no written material of this kind is used and where it is needed the teacher is in effect supplying it "off the cuff". Certain points of difficulty common to a number of students are being identified and for these loops will be provided in the future.

   Diversions are aimed particularly at the more able students and include project sheets (generally the optional extra experiments in the Nuffield Physics publications) and initiative experiments which by definition cannot be prepared for but which are nevertheless encouraged.

   Strictly programmed material has a fairly limited use at the present time. No attempt is being made to write programmed material and that which is used is such as has already been published.

   No publication is used in toto. Programmed material is used where it is felt to be more appropriate than anything devised so far. It is thought that the main use of programmed material will be in review exercises at the end of major sections. This has not, so far, been set in motion.

   Experience suggests that administrative problems will rule out completely programmed courses for most schools. It is in fact suggested that large scale use of programmed material is educationally undesirable, and that it should be seen as another useful tool but nothing more than that. The grounds for this relegation of programmed material are given more fully in the consideration of student attitudes, later in this article.

## Written Materials

It seems inevitable, at the present time, that individualised learning involves a considerable use of written materials. It is most unlikely that any school without access to lithographic facilities could set up individualised learning schemes.

## Worksheets

This word is used to describe all those sheets which give the details of practical work in the basic courses. The majority of the worksheets either describe some experiment to be done and any comments/observations are left to the initiative of the student, or they describe an experiment and also ask probing questions about the work being done.

The worksheets for the Nuffield Physics course are very firmly based on the details supplied in the "Guide to Experiments". Project Technology supply the Basic Electronics course in worksheet form which makes it very easily adapted to individualised schemes. If the Nuffield Secondary Science is to be incorporated into this method of working, worksheets will need to be written. It is the production of these worksheets which makes the greatest demand on the time of teachers. The Physics courses are at the moment the work of one full-time teacher with no secretarial assistance. If really effective and widespread work is going to be done in this field in Physics, then greater support will need to be forthcoming for those engaged in its production.

## Project Sheets

The work on these sheets is optional. The students are encouraged to read through them when they reach that point in the guide. The content of most of these project sheets is very similar to that in the optional extra experiments as given in the "Guide to Experiments".

## Information Sheets

The primary function of these sheets is to contain the kind of information which it was thought essential to write into the "Guide to Experiments". For example, there are information sheets on:

Determination of J
Satellite Data

## Test Sheets

These contain questions taken from the Nuffield Physics "Questions Book". Project Technology supply these question sheets with the other materials for the Basic Electronics course. It is intended to make greater use of multiple choice questions but so far no time has been found to write this kind of Test Sheet.

By using these sheets it is possible for student and teacher to make an assessment of the student's understanding up to that point in the work. Students are strongly recommended (not compelled) to complete the test sheets for homework, and, in fact, almost all the students do so. It means, on average, that they will have one of these sheets to complete once per fortnight. A limit of two hours work is suggested but the majority of students ignore this advice and clearly spend much longer on their homework. There seems to be a very strong desire to complete the test however long it takes - this may or may not be very desirable.

## The Guide and the Check List

These are indeed written materials but their importance requires that they should be given separate treatment.

The student is initiated into this individualised scheme of working by a talk with the teacher about the method of working (in outline) together with a tour of the laboratory to observe how it is organised. At the end of this initiation the student is provided with a Physics folder and the Guide Sheet which, it is emphasized, should be firmly fixed at the front of that folder. The Guide Sheet itemises the various stages in the work pointing out the way through the work sheets, test sheets, film loops, etc.

## Audio-Visual Equipment

The main use has been with 8 mm. film loops, as might be expected, but some use has been made of videotapes and film.

The film loops are indicated at the appropriate point in the Guide Sheet. At the moment, these have to be viewed in a small lecture theatre external to the Physics Laboratory, but a desk top viewer is on order for the laboratory at the time of writing. The loops can be viewed alone or with the teacher, once only or many times. In planning this work the loops have been looked on as an additional and alternative way of looking at a particular piece of work.

The 16 mm. films and videotapes have not so far found very extensive use. Their main use has been with the Group Teaching but it is thought that much more individual use could be made of this material. The problem is finding the time to carry out the planning and organisation necessary for more effective use of these media.

## Books

A variety of science books are being collected together in the Physics laboratory. A loan scheme does exist in the laboratory, but it is very limited and in the main the students are directed to the school library.

## Planning and Organisation of Laboratory Equipment

The laboratory in which this work is being carried out was planned and built with no recognition of the kind of work which would be undertaken there or of the ideas of the teachers involved.

Another important consideration is the organisation of apparatus. We are constantly looking at ways of streamlining this organisation so that apparatus is available for use with the minimum of fuss. A very able technician has provided invaluable suggestions and assistance in this direction. In the near future it is hoped to produce worksheets etc., which will have a coded reference to indicate where the apparatus will be found by the student. We shall not be in a position to complete this organisation until all our main courses up to and including 'A' level courses have all had at least a single run. We do not, therefore, expect this side of our work to be running at its most efficient for some time yet.

## THE ROLE OF THE TEACHER

The individualised scheme described here is not a programmed course in the sense that that term is generally understood. Much of the structure of the scheme is arranged to give the teacher the maximum aid in his work with the individual, and hence his role is a very positive one.

### Teacher Intervention

From the start of setting up this scheme it has been thought that there would be two kinds of teacher intervention:

a) Planned intervention - Two symbols appear on the Guide Sheet, namely (O) and (M). The former indicates that at this point in the work it is essential for the student to discuss the next stage in his work with the teacher. It is usually concerned with making a decision about optional material. The latter symbol indicates that the work has to be marked at this point. Here again there will be some discussion between student and teacher and direct teaching required from the teacher on certain points where mistakes have been made or experiments not fully understood.

b) Occasional intervention - There are numerous reasons for this kind of intervention. However clearly we write the instructions for practicals of this kind, there always seems to be need for teacher intervention; pupils keep making the same mistakes of technique; local conditions require alterations which cannot be written into programmes intended ultimately for national use. It is the view of the author that anyone setting up any kind of individualised learning scheme in any subject must expect and indeed stimulate the need for this kind of teacher intervention. Intermittent dialogue between teacher and student and student and student should be an expected characteristic of any individualised scheme of learning.

## Group Teaching

Clearly, this is one aspect of teacher intervention but because of its special importance in our scheme it is being given special and separate consideration at this point.

It is thought by the author that there are some topics which are better taught directly by the teacher using the conventional class teaching methods, but applying them to a group at a time rather than to a class as a whole. Examples of topics dealt with in this way are given below. It will, of course, be realised that the group teaching will rarely be the only source of learning on that topic, generally the group teaching will deal with those aspects of that topic to which it is felt to be particularly appropriate.

## Group Teaching Topics

1. Stroboscopes
2. Proportionality
3. Force/Mass/Acceleration
4. Mass and Weight
5. Inertial and Gravitational Mass
6. Bernouilli effects
7. v/t and s/t graphs
8. Kinetic energy
9. The molecule
10. Conservation of energy
11. Current
12. Voltage
13. The Millikan Experiment

These topics require the same care in preparation as that which would be given to a traditional lesson in a class teaching scheme. These group teaching occasions should not be regarded merely as chalk and talk opportunities, but should make appropriate use of all the aids available to the teacher.

Perhaps the most important innovation in the whole of the individualised learning scheme in "Physics" has been the technique by which the group teaching has been integrated into the scheme. This integration is absolutely dependent on the disciplined use of the Check List. It is very important that whenever a group teaching occasion takes place:

1. It involves only those students whose individual work to date makes them able to participate fully since all their necessary preparatory work has been completed.

2. It involves all those students who have reached this position, since this reduces the amount of repetition required from the teacher.

It is essential for student and/or teacher to know when such a position in the work has been reached. At the moment the teacher is able to ascertain this information from the Check List and the students are called together with teacher. At the present time this is not fully used due to the limited time available for the proper planning of the group teaching occasions. When all the group teaching topics are completely prepared, second generation Guide Sheets and Check Lists will be prepared which will show certain stages in the work asterisked, which will indicate to teacher and student that their next assignment is one with the teacher.

By the above technique it is possible to allow students to become widespread over many topics and indeed courses and yet at the same time have group discussions and intersperse the individualised work with traditional methods. Reid and Booth found that "few attempts were made to hold class discussions, or to intersperse the programmed sessions with traditional methods. In any case this proved very difficult to organise, once the class became widely spread over two or more topics."

It is thought essential to develop some such method of organisation of group teaching as above, since group teaching is the most appropriate way of dealing with many topics, and furthermore, greatly helps in the development of a corporate spirit within the laboratory - something probably absent from a rigidly individualistic treatment.

## Marking

There are two kinds of work which are marked, practical and test material. The marking is on a five point scale A, B, C, D, E, the students being told at the commencement of their course that C means "satisfactory", that A and B represent good work, and that D and E represent poor work. It ought to be noted that these marks indicate the present performance of the student against the background of the teacher's previous experience of the student, and do not represent the student's performance in relation to some objective standards. All the marks are recorded on the Check List, the student having the mark entered on the written material which has been marked.

The marking is considered to be very important in a scheme of this kind in that:

- it involves further student/teacher dialogue which should be mutually beneficial;
- it gives the student some indication of the standard he is attaining in his work;

- it shows the student that the teacher is interested in the growing skill of the student in this particular subject. Reward (AB) and punishment (DE) are both important in this respect. It is common experience in traditional class teaching as well as in schemes such as this that lack of active interest in the subject can often be traced to piles of unmarked work.

In conclusion, it needs to be stressed that the teacher must be constantly alert to the progress of every individual. It is certainly true, under this method of working, that the "more able" shoot ahead and one is tempted to let them get on with it when it would be better to stretch them even more. On the other hand, it is very important to see that, in giving the "less able" more time in which to complete their work, they are not allowed to become bored to tears. With all the students, and especially with the latter, it is important sometimes to get them to leave a section of work even if it is unfinished. This kind of vigilance is an important aspect of the role of the teacher.

## Examinations

Whatever methods of teaching/learning we adopt, the student will inevitably be faced with the necessity to take an examination.

1. Internal - There is no need nor would there be any justice in setting papers at the end of the school year. The only internal examination worth consideration is the "mock", its value lying in the preparation it gives for the final external examination.

2. External - In using an individualised learning scheme we find that students complete the course at different points in time, obviously. This presents us both with a difficulty and an opportunity.

If we consider that the optimum time for taking an examination is immediately after completion of the course, then some of our students are not going to be taking the examination at that optimum time. This is a limitation of the external examination systems. Should schemes such as the one we operate become more widespread, then the examination boards must consider greater frequency in examining. It seems to the author that this should be quite possible. Large banks of questions could be collected by the boards and randomly selected for each examination occasion.

The opportunity afforded by this position, is that of being able to go on to new and more advanced work, or develop other ideas which there is rarely time to do in the conventional set up.

Post 'O' level students in Nuffield Physics have been encouraged to make a start to Physics Part 4 (first year Nuffield 'A' level), taking the 'O' level examination when it arrives. Should the student not wish to do this then he may select from a number of other possibilities.

- commence a series of revision exercises in Nuffield Physics;
- commence a study of some other science subject which is intended for study at advanced level;
- develop some project work;
- arrange with some local firm to obtain some work experience, and do some preparatory work for the course of education he will take on day release.

These options will also apply of course to others who have completed their "physics".

Post 'A' level students enjoy the possibility of similar options, should they complete the course some time before the examination. Options under consideration are:

- preparation for physics at the university probably in association with the Physics Department of Leicester University;
- development of major projects through the Link Scheme of the Chemical Society or some other similar scheme that may then be in existence;
- arrange for work experience and preparation for sandwich courses and the like.

## Conclusion

### Student Attitudes

The first group of students to experience this individualised scheme had already been three years in a streamed, class teaching situation. The "more able" students certainly found this scheme a great help and a release from the frustrations of restricted work. The "less able" had a difficult time partly because of the time that it took them to become accustomed to the new way of working and partly because the teacher, subject to the not inconsiderable demands of the first year, was unable to give them the attention that is possible now the scheme has been functioning for some time. It ought to be pointed out that "physics" was carried out for the first half-term without laboratory or apparatus!

The second group of students (70 chose physics last year) have been a great encouragement. From the most to the least able they are very much involved with their work and seem to find the method of working very much to their liking. We are very interested to see how students who have been involved in the "Integrated Day" approach at Junior School, moved through the partly individualised (topic by topic) approach of the High School, will perform when they become involved with the individualised Physics scheme. It is thought that this is a time when we should see the very best results.

By deliberately introducing into this scheme the maximum variety of approach we have avoided the groups of bored children sometimes encountered. It is thought that any scheme which relies overmuch on programmed material is likely to breed boredom. There is a need to have a great variety of approach, the particular approach being decided by what is most appropriate to the material being used and the knowledge to be imparted.

### Computer Assisted Instruction

It is evident that this technique could have a considerable and useful part to play in an individualised scheme, but it is unlikely that any education authority in this country is likely to have the capital essential to make such an investment in the near future.

### Future Developments

1. Individualisation of the Nuffield Secondary Science scheme is becoming an important consideration. Not all staff in the Science Department are convinced of the methods employed in Physics and even less that they can be transmitted to other subjects in the Department. Clearly a great deal of discussion needs to take place, but it is felt that much freer movement between laboratories will be an important aspect of this development.

2. Individualisation of 'A' level courses (Nuffield) is an urgent necessity. The integration of group teaching and group discussion into the individualised 'A' level scheme demands a considerable part of our time.

* * * *

There have always been those in the Science Department who have doubted whether the Department's methods did enough to encourage learning and as time has gone on, the doubts have tended to grow. The head of department himself has been careful to insist that the worksheets and the tight programming of a basic course do not in themselves comprise the whole outlook of his department. Others have begun to question more strongly the prevalence of worksheets within the department and the department's general lack of involvement in the work of those students who do not choose to study specialist science. For while the department has offered wide scope to students already committed to some kind of scientific course or enquiry, it has sometimes seemed to have little effect in stimulating a wider and deeper interest in science among those less committed.

Within the past two years, an attempt has been made to introduce a range of scientific enquiries into the work of the teams, a development which is as yet in its early stages but which is likely to have a marked effect in the future on the relationship between "teams" and specialist departments in general.

In supporting "teams"time the science department has moved rather closer to the style of teaching and learning characteristic of teams. At the same time, the more apparent rigour of specialist science teaching within the school survives and may well in its turn have an impact on the future development of work within the teams. But that is still for the future.

# APPENDIX

## GENERAL STATEMENT OF POSITION

prepared by the staff of
Countesthorpe College for the
visit of H.M. Inspectors, 1973.

Countesthorpe College opened in 1970 with a stated intention by its staff and principal to serve the identifiable needs of its students for the present and the future. This did not imply a rejection of the past so much as a resolve to question any established practice for its validity in these terms instead of continuing it automatically. It was recognised that if teachers failed to ask such questions, the young were already doing so.

Because of this increased questioning on the part of the young, it is felt that the key to successful learning, under any heading, is going to be found in the student's own motivation. This motivation might be internal, arising from the desire to achieve understanding and to produce successful outcomes of work, or it might be external, arising from the desire to pass examinations, to progress towards a satisfactory job, to please family, teachers or friends. In either case, learning is recognised as an outcome of relationships that will increase such motivation, and that the basis of this is in the recognition of the teacher as an accessible, trusted adult.

With this eye to present and future needs, any approach to learning must take into account such factors as the explosive growth in the sum total of human knowledge and the increasing mobility of people in their work, dwelling-place and general human contact. A static body of common knowledge forms only a very limited part of necessary information, and children now acquire a high proportion of this from such sources as television and travel. The school curriculum is consequently less concerned than formerly with how teachers impart knowledge than with how learners obtain it, select from it and use it. We have seen the teacher in the role therefore more as organiser of situations in which learning may occur, one who poses or identifies problems that students will be motivated to solve, one who heightens that motivation and one who imparts the skills for solving these problems.

The knowledge needed by the adolescent student seems above all to include knowledge of the self and of the relationship of self to the environment, socially and physically. The skills of obtaining and employing this knowledge are seen to include logical skills (analysing, generalising, synthesising), communication skills, creative and expressive skills. They relate to the social skills that make it possible to collaborate with others and carry through undertakings to successful conclusions.

It is with these aims in mind, the maximum achievement of each individual's potential and, increasingly as they grow up, each individual's taking the responsibility for that achievement, that Countesthorpe developed its forms of architecture, curriculum, personal relationships, style of teaching organisation for learning, and internal government. Above all, it is felt that in a comprehensive school, these aims, to be valid, must apply to all.

As far as our curriculum is concerned, the student selects from its possible combinations with the guidance of staff in such a way that an individual's timetable may be unique. The teachers will have in mind a concept of the balanced curriculum and a practical application of it to the individual student's capacity and interest, but they will relate this to the student's expressed interests, so that the agreed programme will be the result of a negotiation. (Hence the need for access to teachers and full opportunity for developing the skills of negotiation.) How this has led to our system of teaming in the Upper School is outlined elsewhere.

Certainly, the need for all students to find access to teachers and to know them as trusted adults has led to a loosening of the formalities that often form a barrier between student and teacher. We have abandoned the staff-room as a separate social area. Staff have a number of small rooms for some privacy in preparation and storage, but the general social area, used by day and evening, allows for a high degree of contact between staff and students.

The general aims and the architecture lead to a style of learning that is centred on work based upon problems, posed by teachers and often by the students themselves, and carried out by the students individually or in small groups. There are times when larger groups form, for presentations or instruction, but the small group is the basic unit for study. The study may be expressive, creative, or it may need to draw on the resources made available by the staff. These resources, including library books, and other papers, audio-visual equipment, materials prepared and printed by staff, and of course the staff themselves, are made available in a wide variety of ways. (See below).

Our system of internal government, in which every member of staff and the student body has a part that can be taken, derives from the system of learning. The more a student takes responsibility for studying, the more a student will need a voice in determining the conditions of study: the more teachers are expected to coordinate their implementation of curriculum, the more they will need to determine the organisation of the available resources and distribution of responsibilities.

The external provision for our college is made by the Leicestershire County Council. It determines our comprehensive nature, our establishment as a Community College, the catchment area and age of entry, it allocates the finances on which we run, and maintains the building and site. Our main intermediary in seeing that these provisions are carried out is the Governing Body. Its membership includes representatives of the community council and staff have two representatives who attend meetings. With the local education authority it appoints the college principal whom they hold responsible for the curriculum and conduct of the college. The Moot and the Community Council formulate the college's policy. The principal, as well as playing a full part in policy making through the Moot, the committees and the Community Council, acts with his deputies as chief executive. In the light of existing l.e.a. practice, the Moot recognises the special responsibilities of the principal in representing the college to the outside world, in particular the governors, the l.e.a. and the local community. The Moot is open to all staff, students insofar as they wish to attend, and parents when they are able. The Community Council is a body representing each class or group of users within the adult and youth provision of the college. The Moot meets about once a month and the Community Council about once a term.

The Moot forms sub-committees, standing or ad-hoc, to deal with specific business. The principal standing committee meets once a week to consider points at issue, to advise the executive, set up its own working parties and to determine when a matter affecting basic policy requires a Moot to be called. The principal and deputies attend all meetings to give and take advice. The day-to-day business of the school is undertaken as appropriate by the principal, deputies, the administrator, the staff as tutors, year-teachers and heads of departments as detailed in the following papers.

At this point in time it is possible to say that this system, though dynamic, has stabilised. This stability is felt to be crucial to the student's capacity to learn. It has come about with a growing awareness on the part of students that their teachers carry authority in their function as teachers without appearing to be authoritarians. This implies that the teacher will need to lay down certain prerequisites for learning even though he is open to negotiation over what is to be learnt. It also implies that certain constraints expected by the watching public, parents and others, must be respected if the goals of the school are to be achieved. These things we recognise.

The start of public examinations in 1972 has also affected student attitudes towards study. With advantage it has provided additional motivation: but for many it has created a situation where non-examined activities are undervalued and rejected. On the other hand, two years of results at G.C.E. 'O' level and in C.S.E. have given confidence to students and their parents where any of them had suspected that the more tangible dividends might not be forthcoming.

Finally, it should be stated that our development is dynamic, has not and is unlikely to reach a static, perfected arrangement, for one main reason: the initiative for change may come freely from any source rather than solely from the top. There is good evidence to show that the more hierarchic an organisation is, the more resistant it is to change. Our system facilitates the expression of anyone's inventiveness, staff or student. This does not mean that we plunge headlong from one random innovation to another. Far from it. Proposals need to be carefully presented, will then be critically examined in working parties, experience will inform the judgements passed, modifications almost invariably are made and consensus needs to be reached before implementation. This has the advantage of enabling everyone to feel that they really can affect the working of the college and of committing them consequently to the policy and practices adopted as a result of the process.

There is, however, another side-effect of this system that merits observation, though it is probably not a disadvantage in the long run. It is that we appear, even at times to ourselves, to be a disputatious lot. We readily air our disagreements and criticise each other's views, expecting and taking for granted the high degree of mutual tolerance this requires. Because we also take for granted now a high level of agreement on overall aims, we may sometimes fall prey ourselves to the passing belief that we are racked with schisms. This is not really so. It is another outcome of our openness that our differences are laid bare, because we believe that only in this way will attitudes and practices be modified so as to bring us to a consensus.

But only a superficial hearing of these debated issues could suggest polarisation among staff, even on an isolated issue, let alone over their sum total. What we can lay claim to, with some pride, is an open dialogue on the real concerns, a confirmed belief that only out of such continuous dialogue will the acceptable way forward continue to be found, and that the context for the dialogue is a strong body of shared commitment. This commitment can be summed up by stating that we regard all our students of equal value but each one as having unique needs and capabilities; that we attempt to cater for this uniqueness so as to do justice to each student in terms both of personal social development and of qualification for employment and continuous education; that as an essential part of the process, we should guide all our students towards the goal of accepting responsibility for their own actions, to achieve moral autonomy. A centrally held belief can be the least often stated because it seems obvious to its holders: these declarations may be worth making as a statement of what binds us together at Countesthorpe.